

wherein the alignment member retains the at least two coaxially disposed tubular members in a fixed relative position and orientation with respect to each other.

43. A biopsy instrument drive apparatus comprising:

a housing;

a carriage assembly slidably disposed within the housing, the carriage assembly adapted to receive and removably retain a biopsy instrument; and

a firing module being detachably engageable with the housing and operatively associated with the carriage assembly to facilitate selective rapid linear advancement of the carriage assembly.

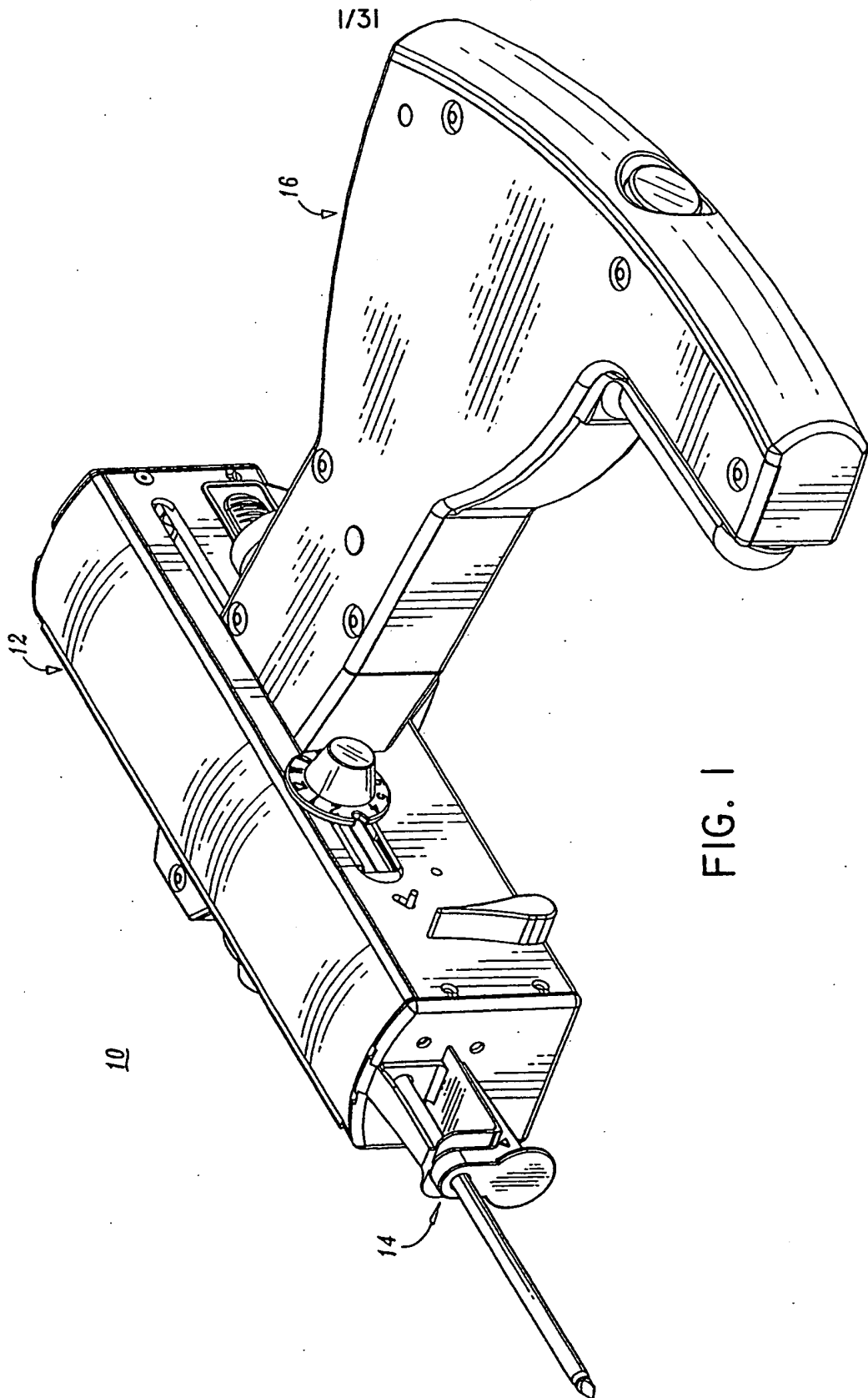


FIG. 1

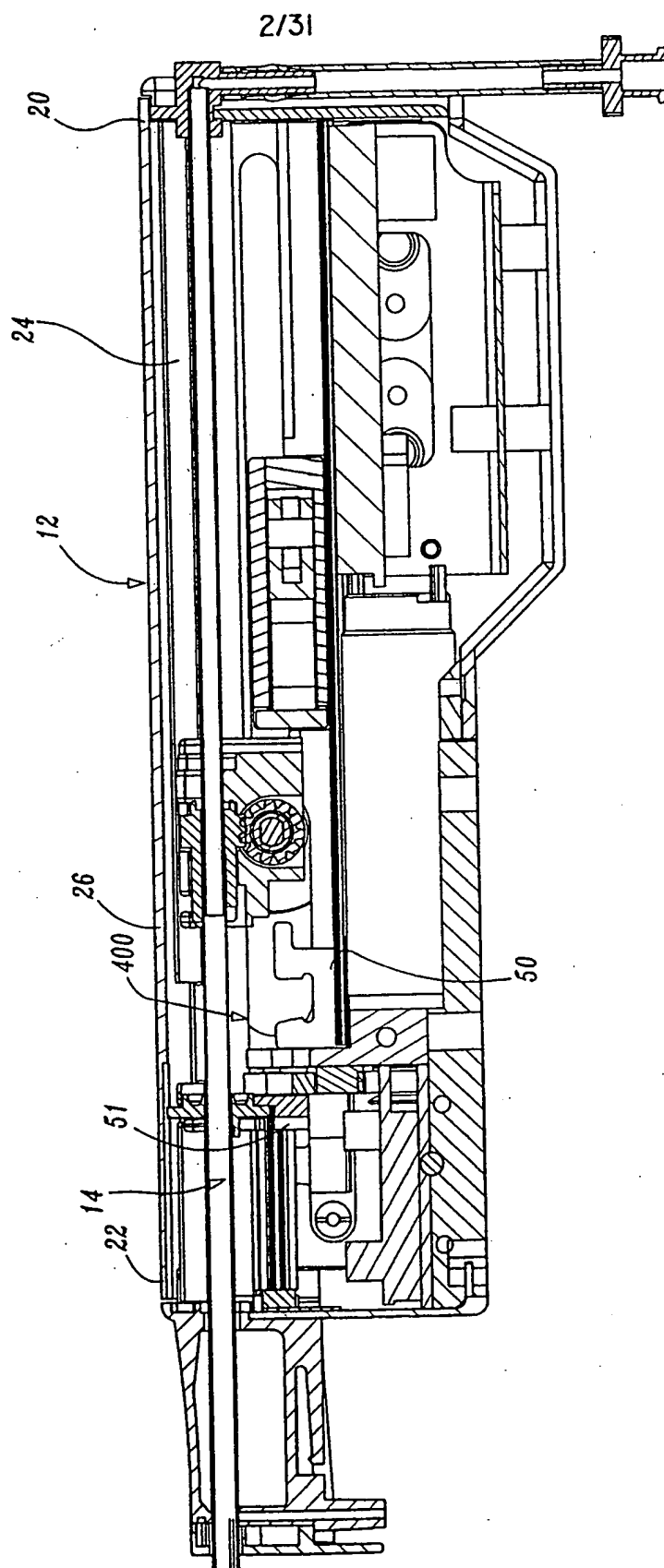
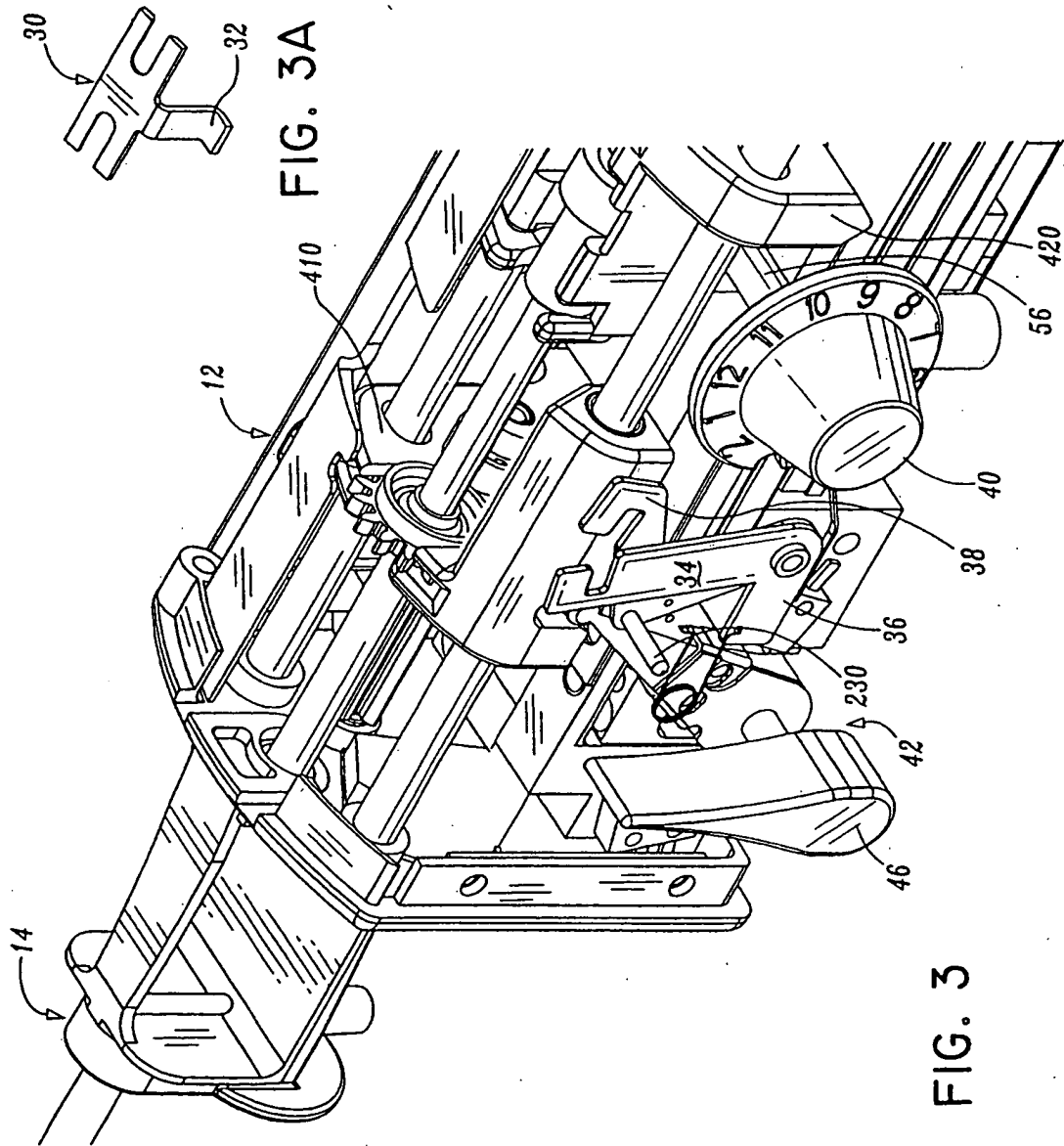
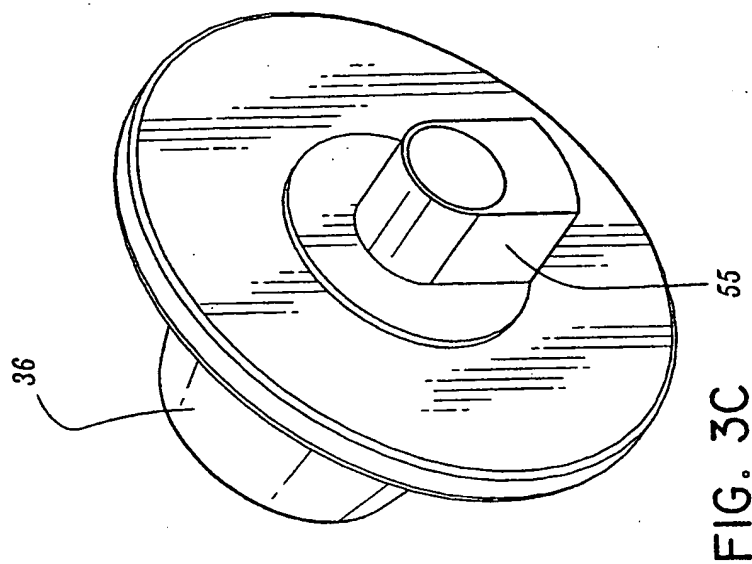
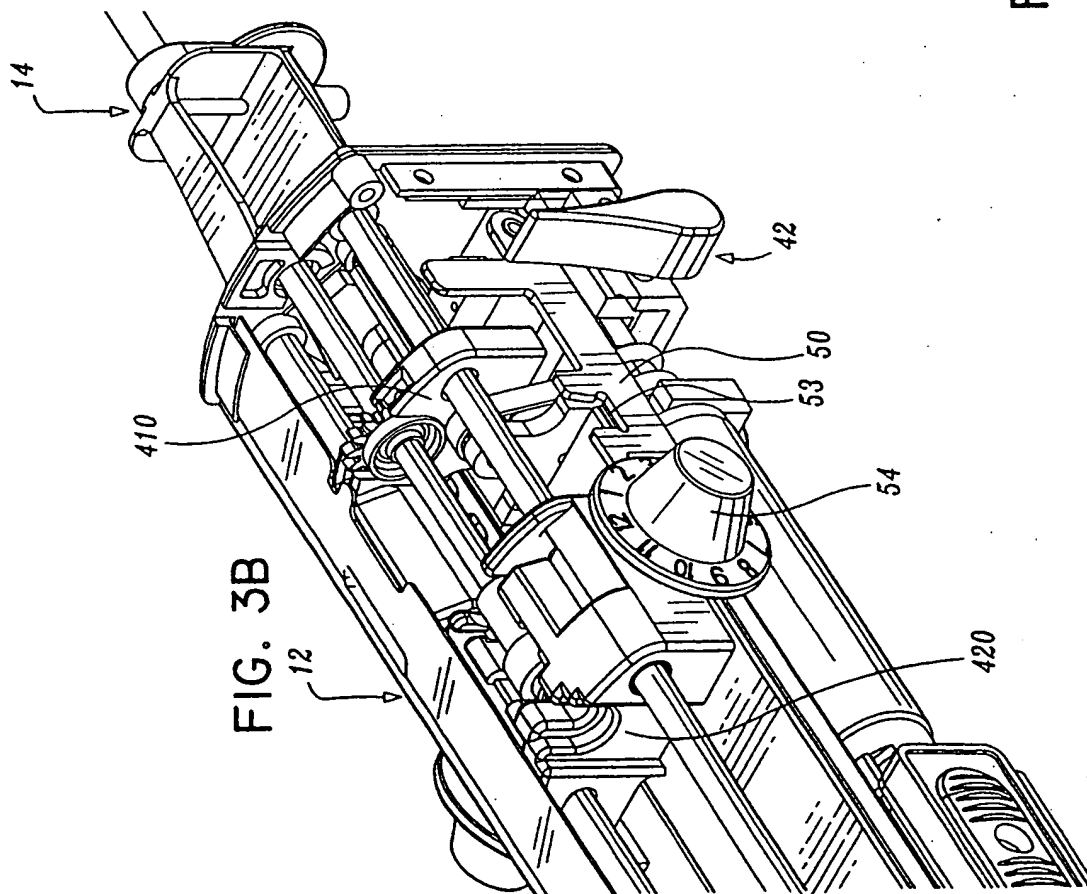


FIG. 2



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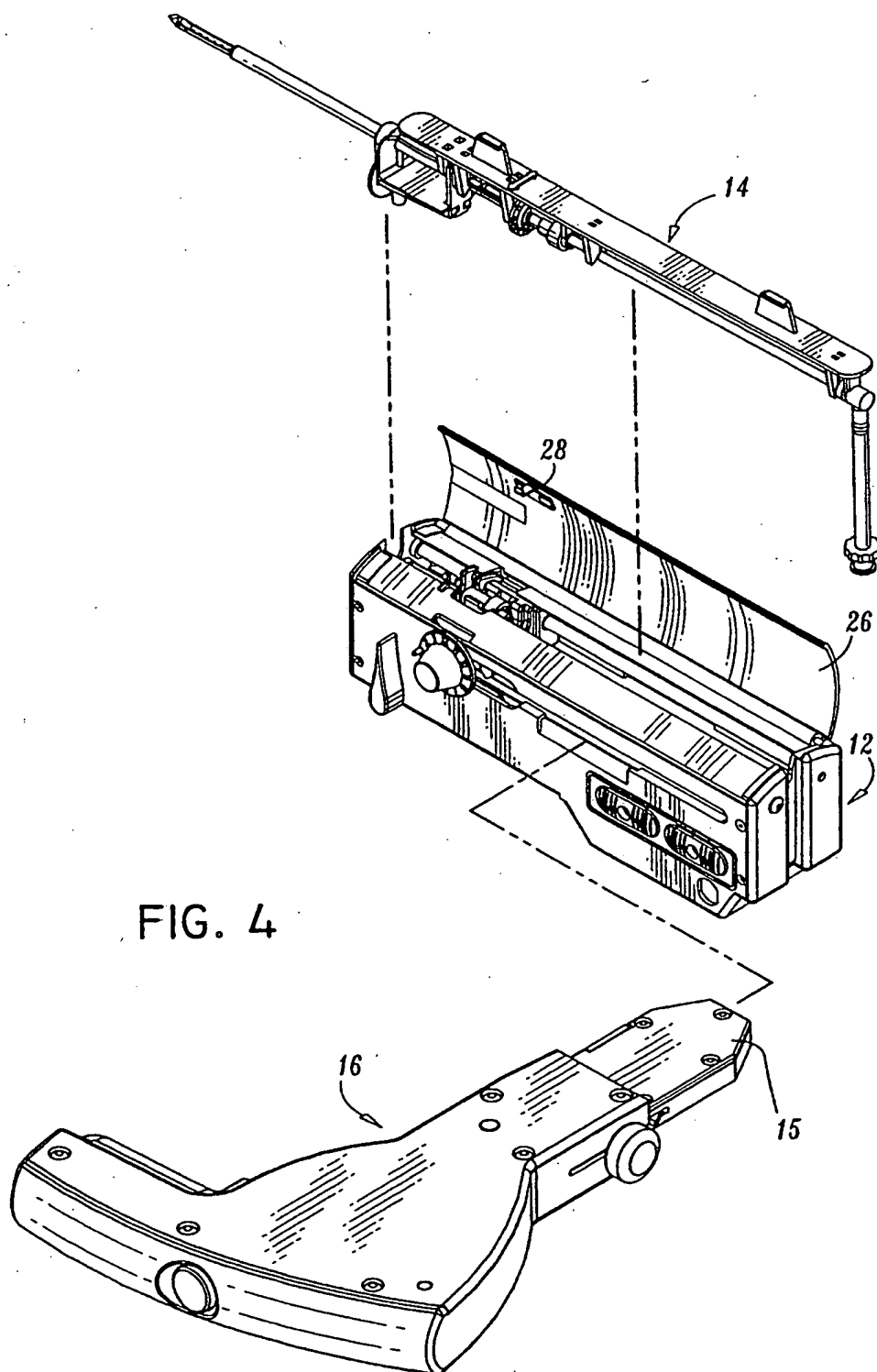


FIG. 4

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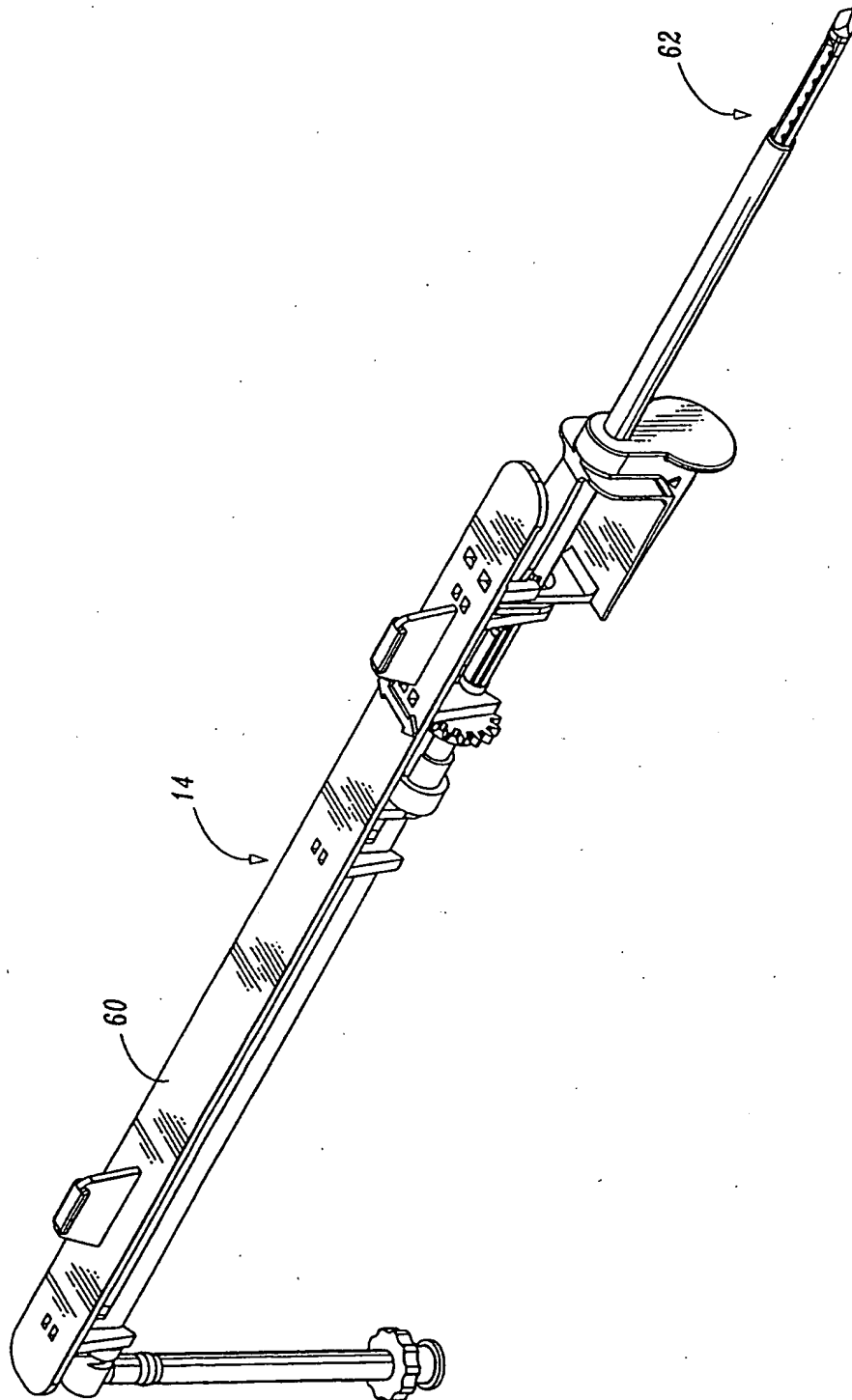
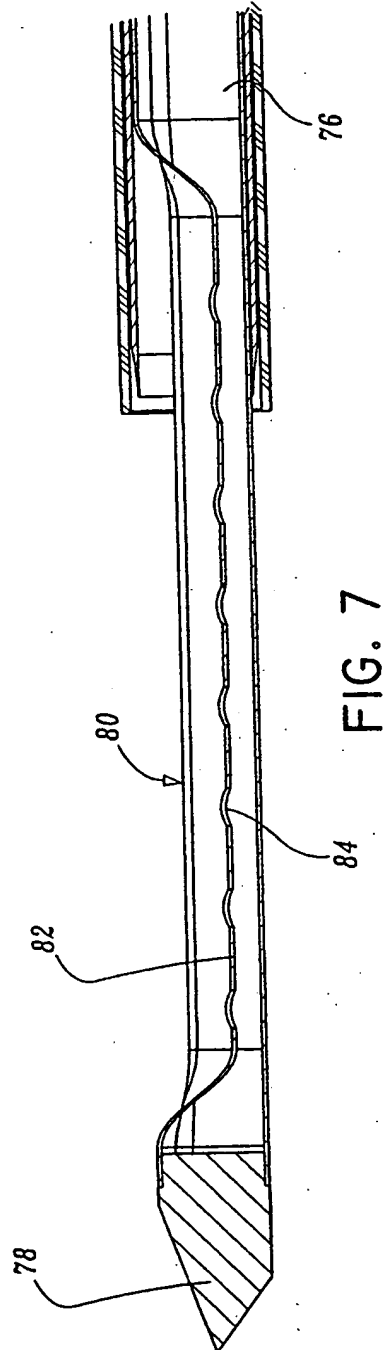
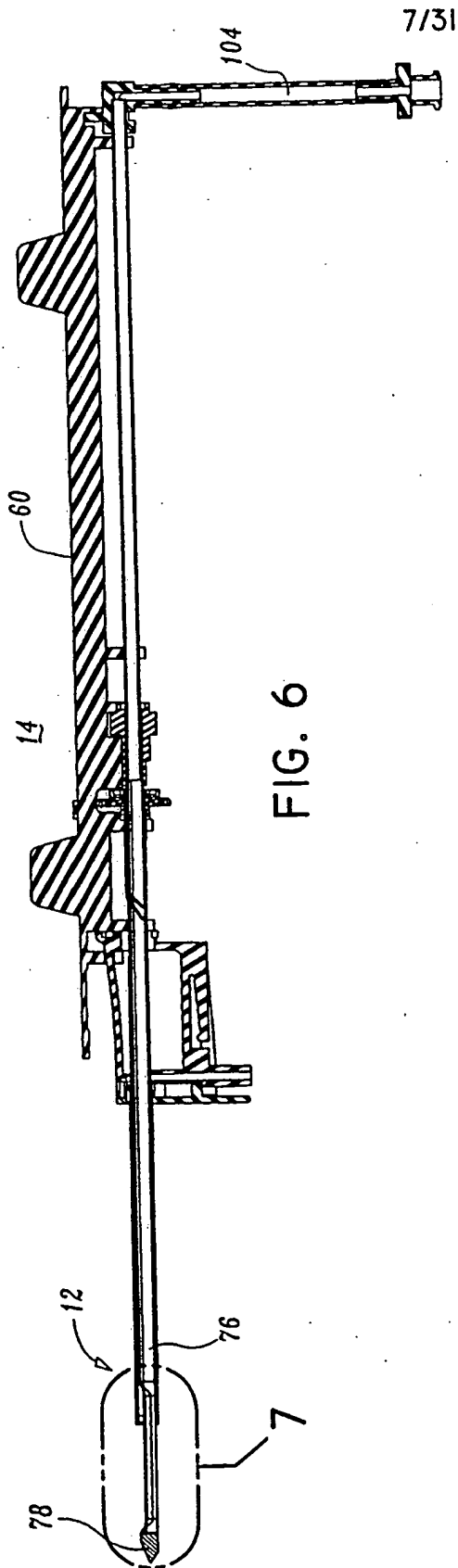


FIG. 5





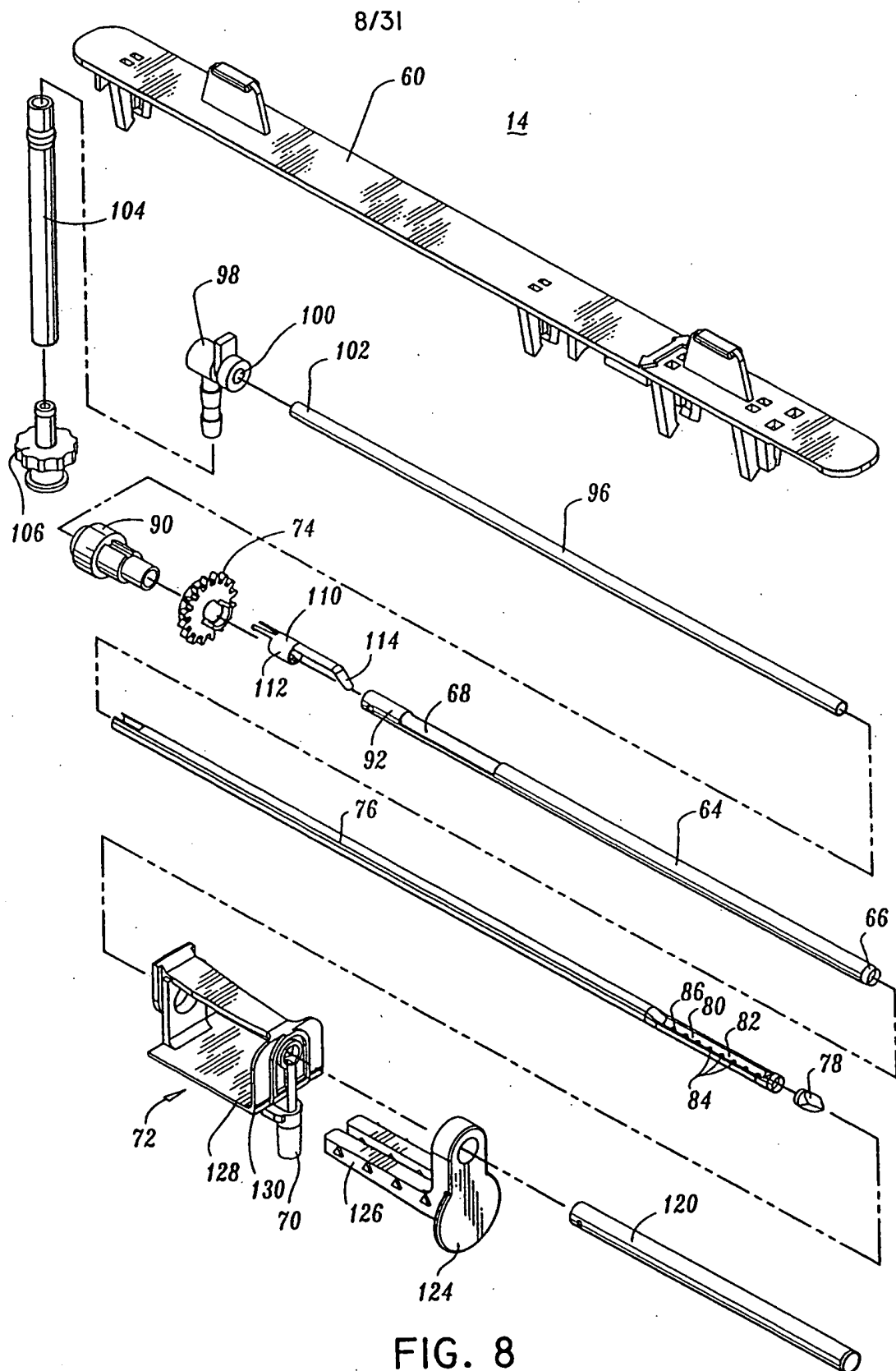


FIG. 8

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FIG. 10

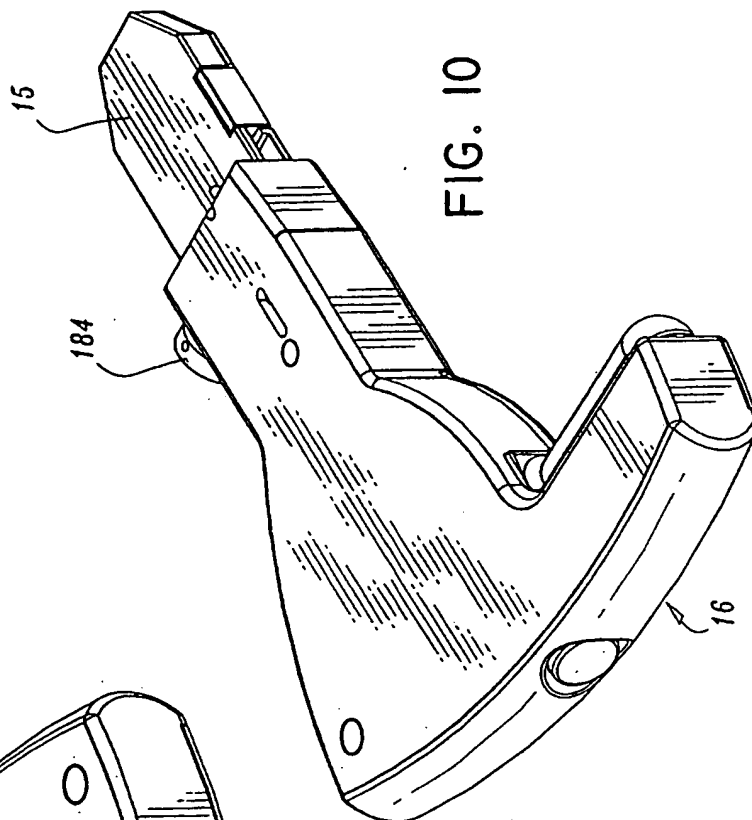
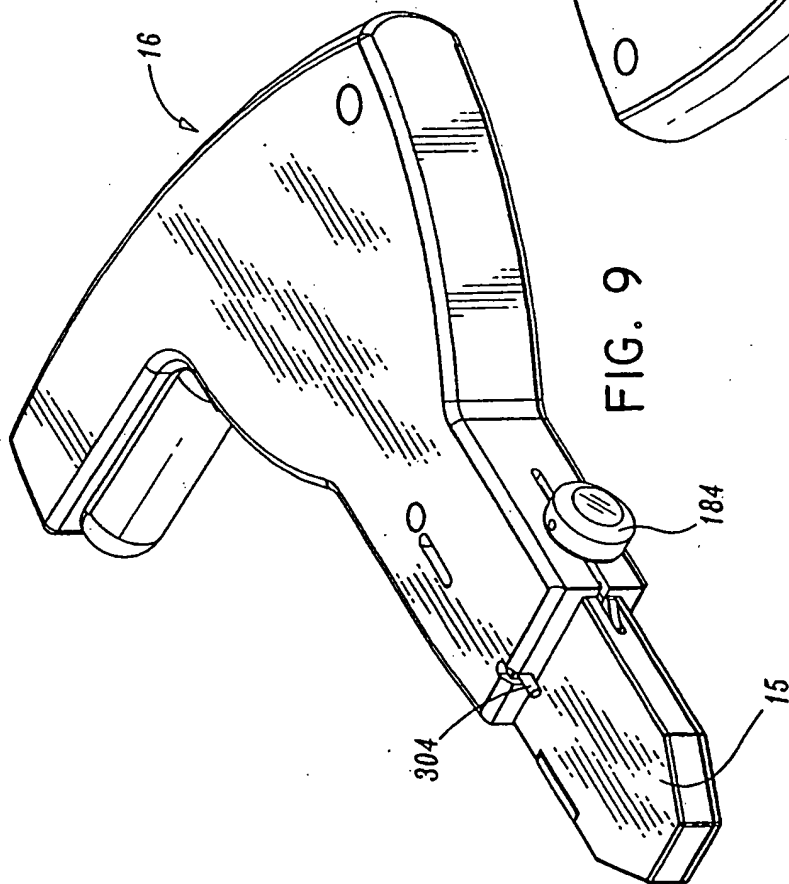


FIG. 9



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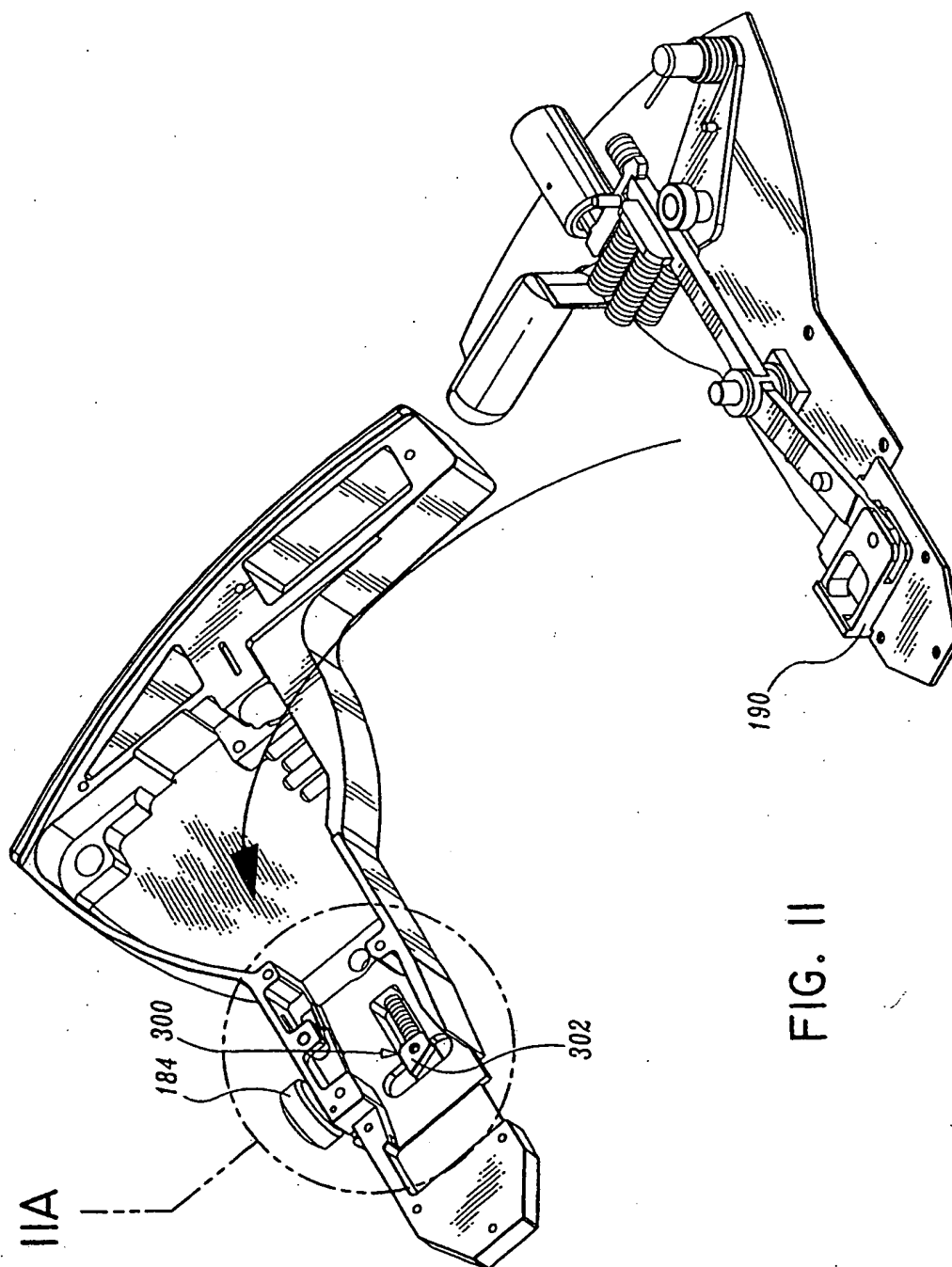


FIG. II

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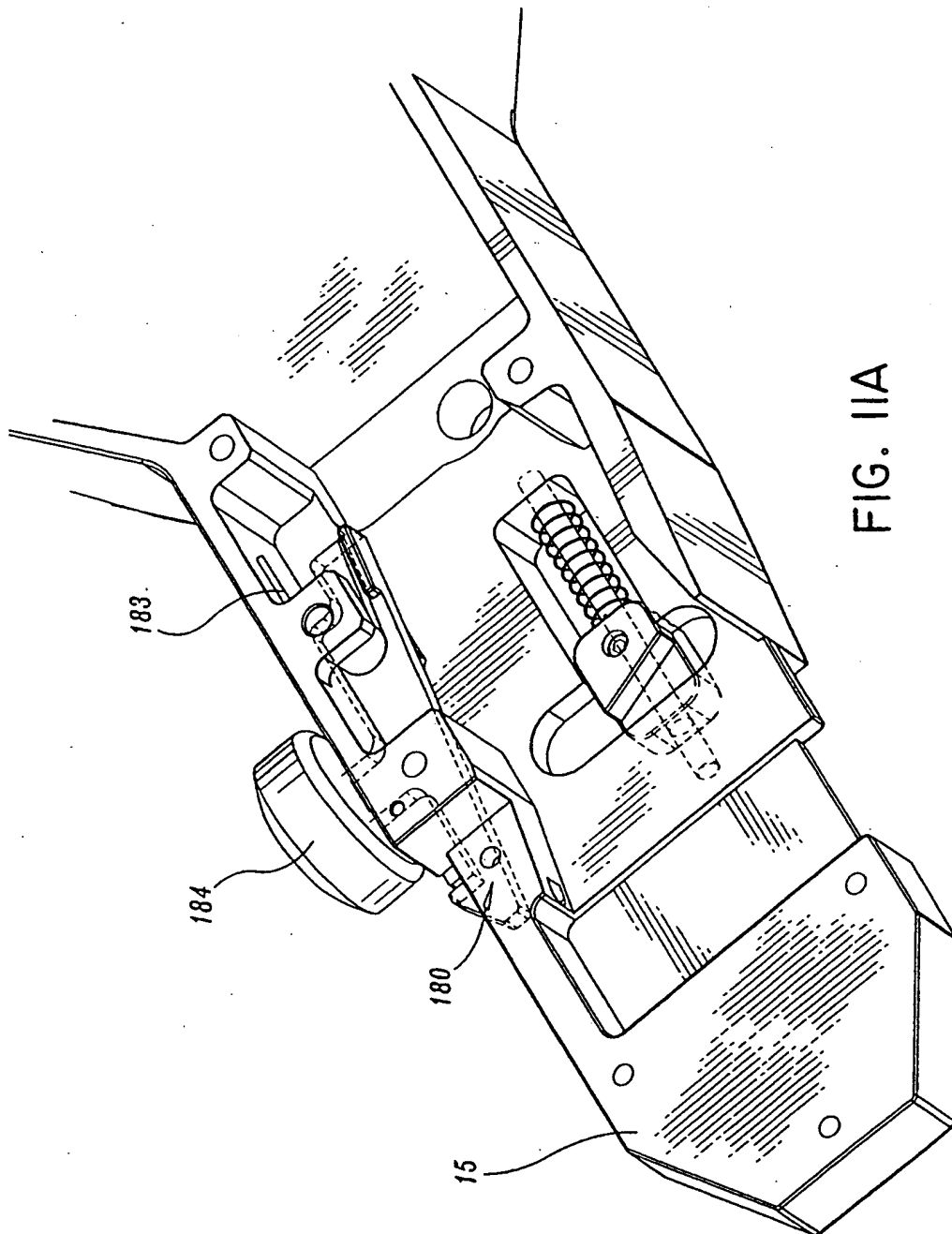
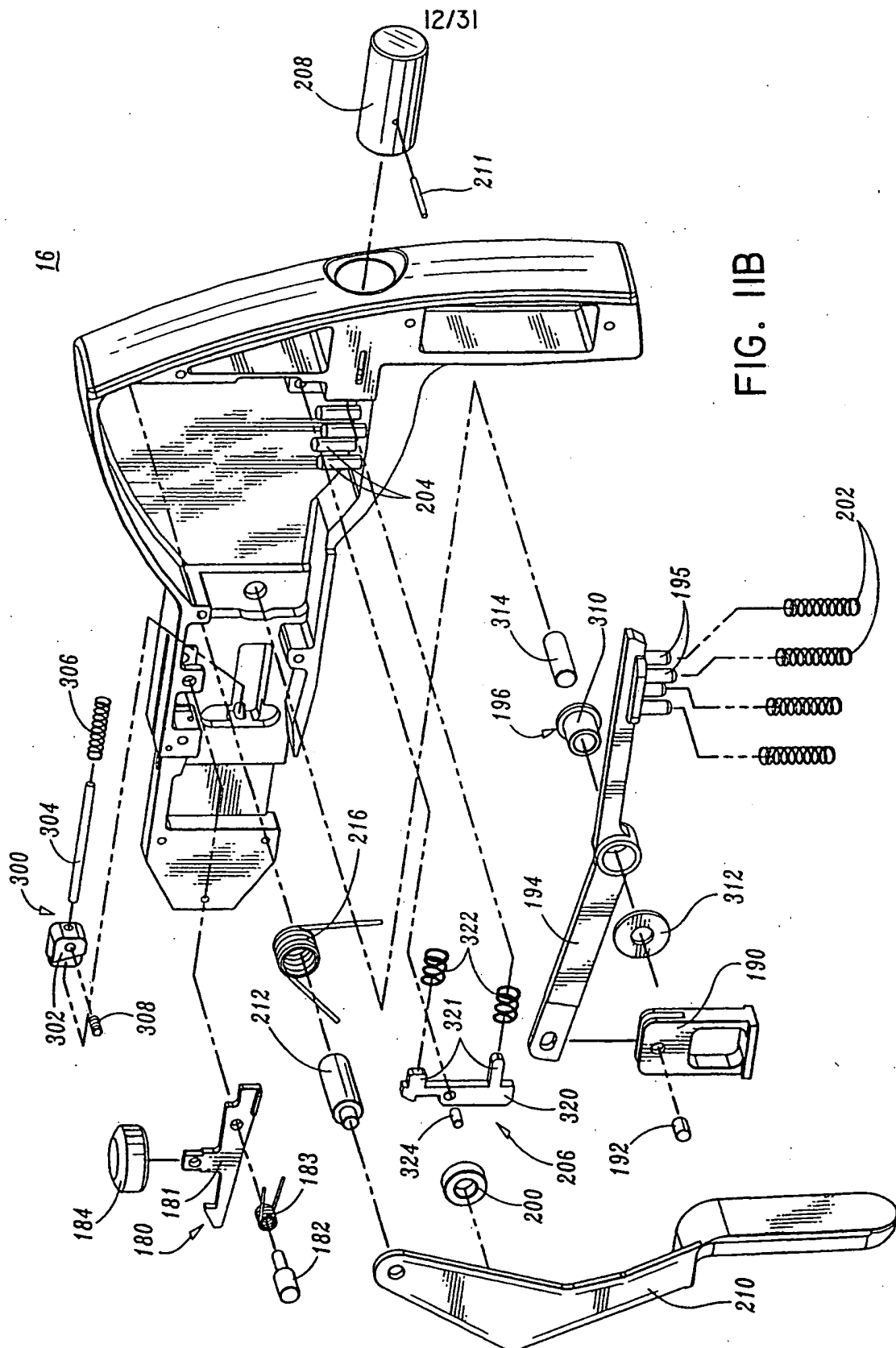
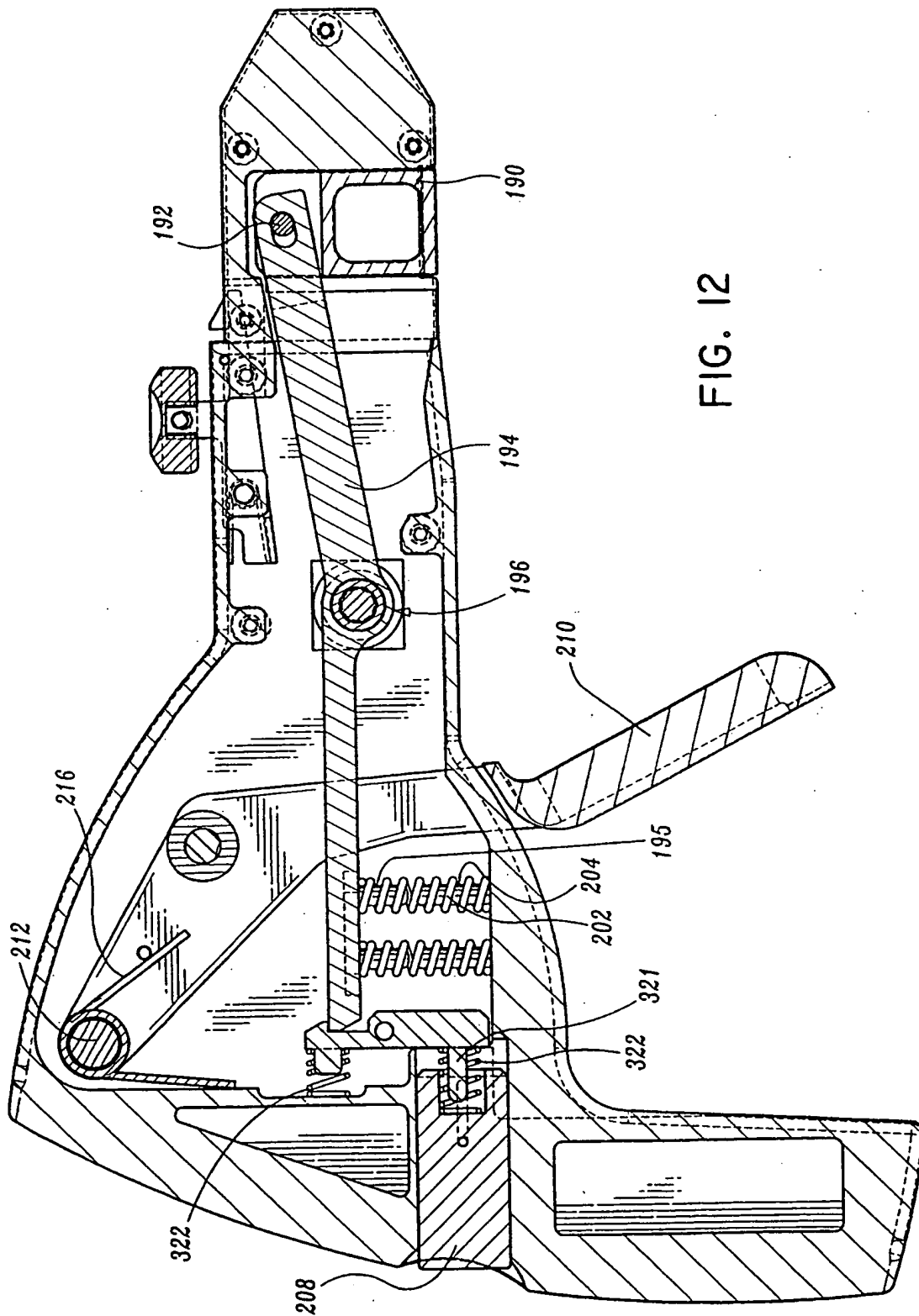


FIG. IIA



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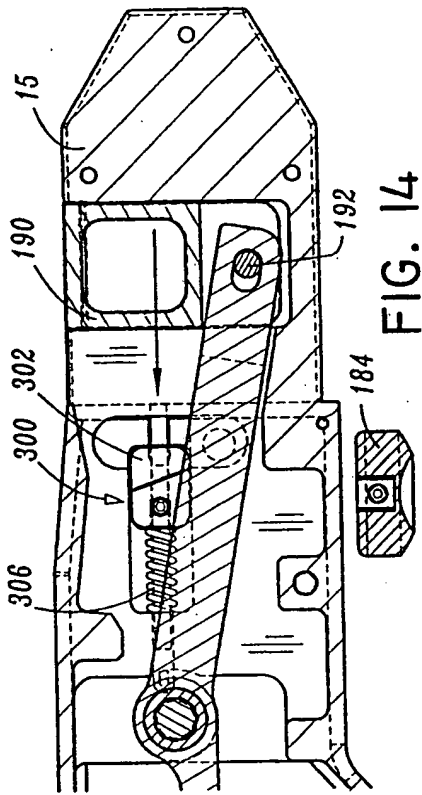


FIG. 14

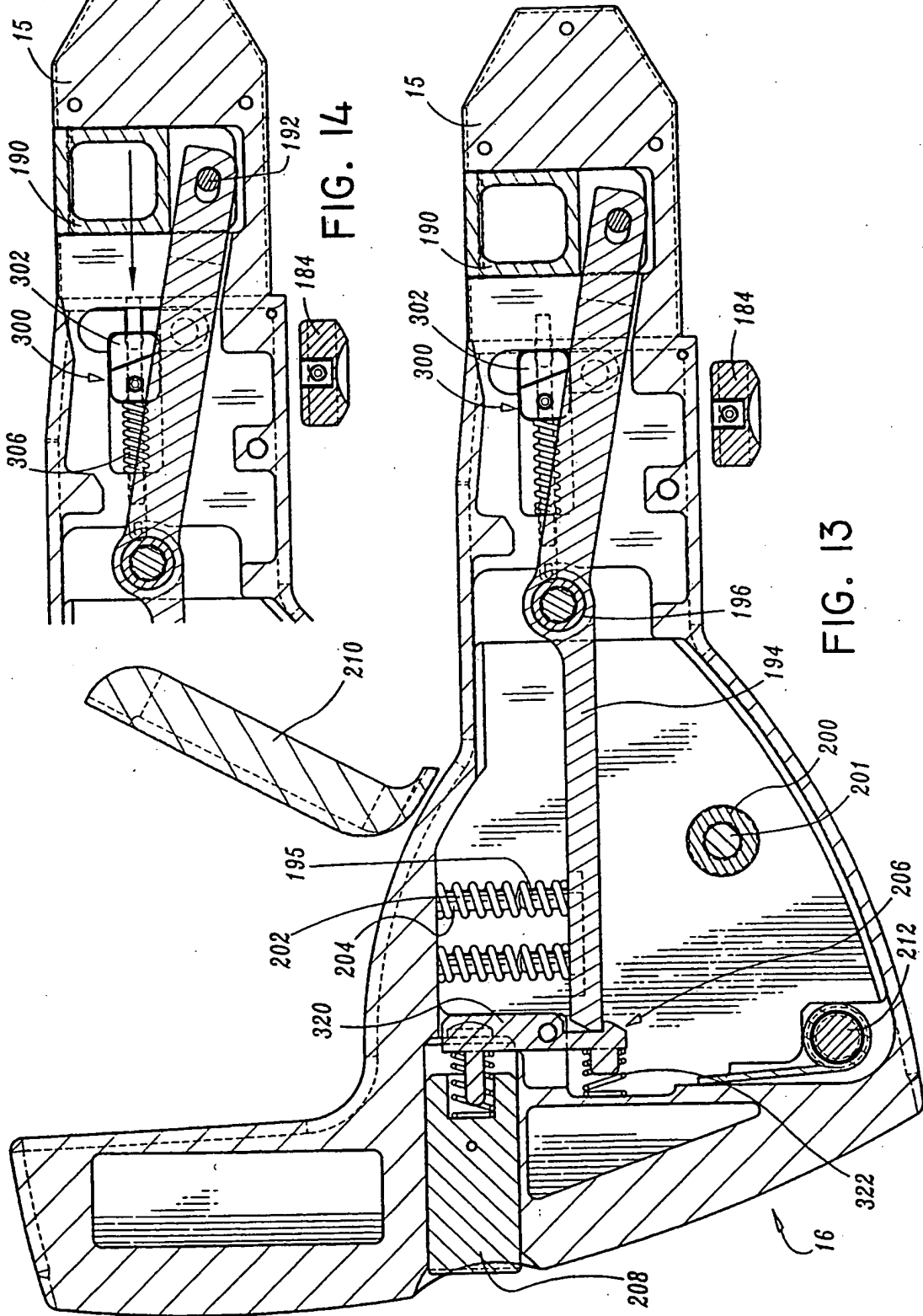
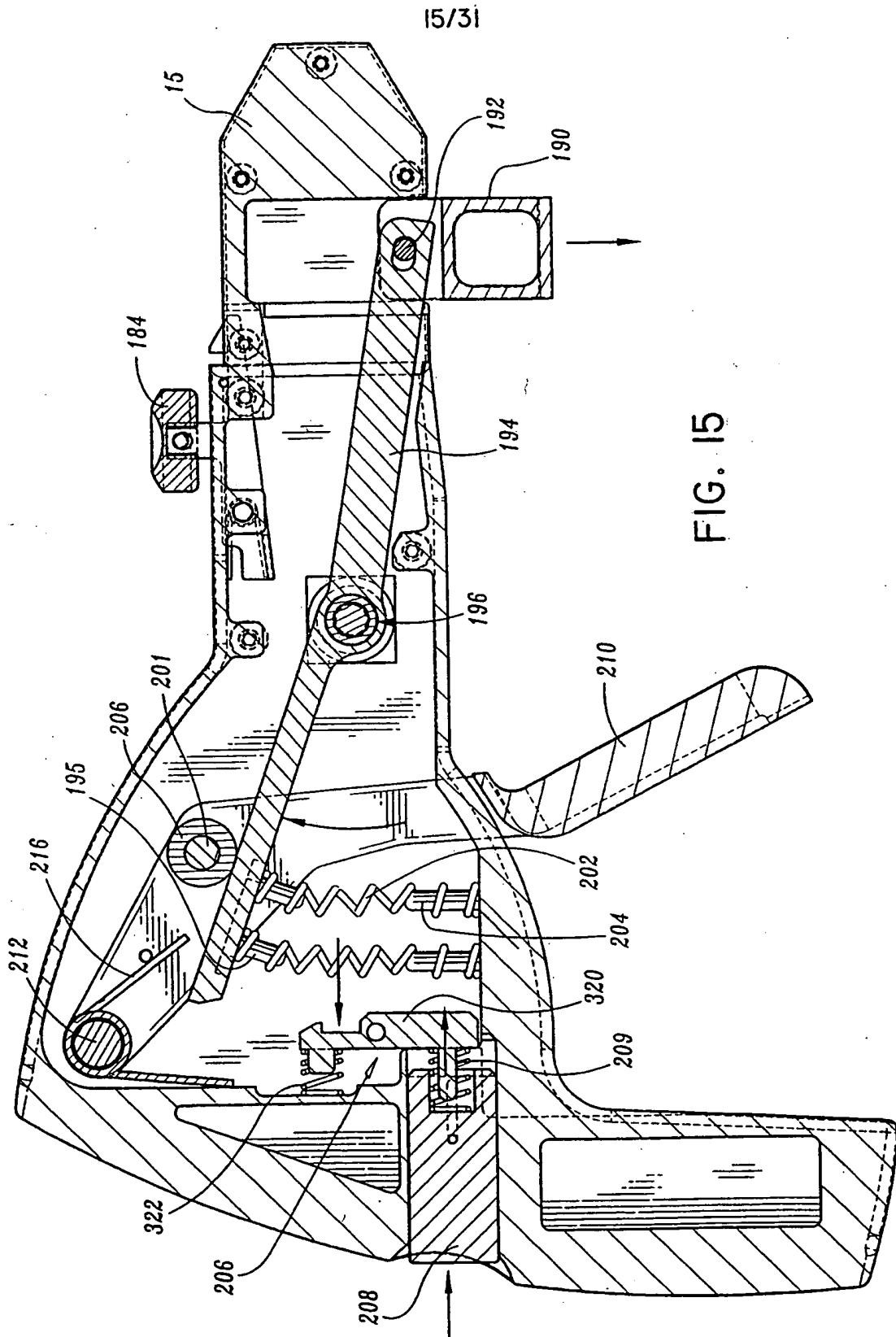


FIG. 13





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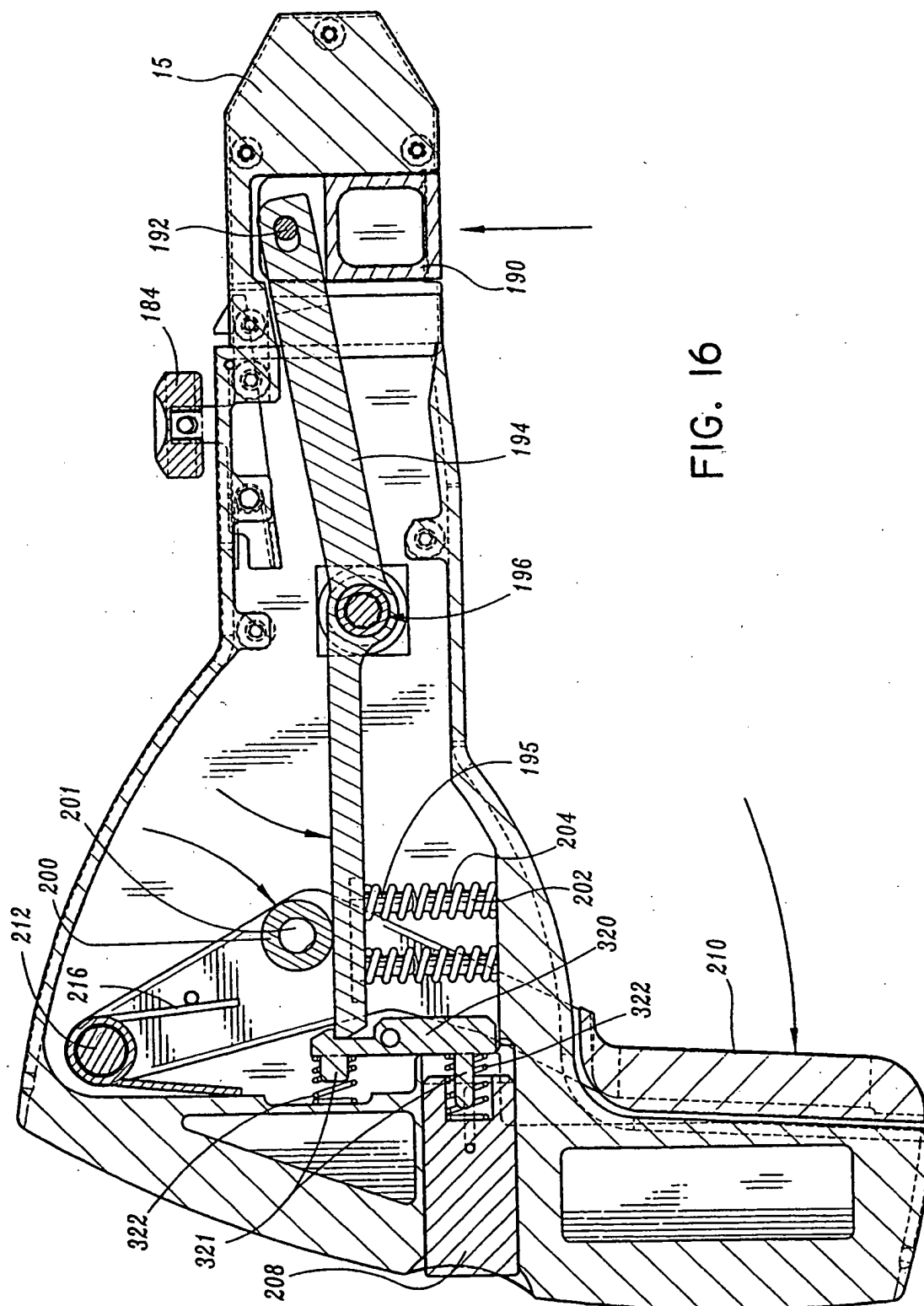


FIG. 16

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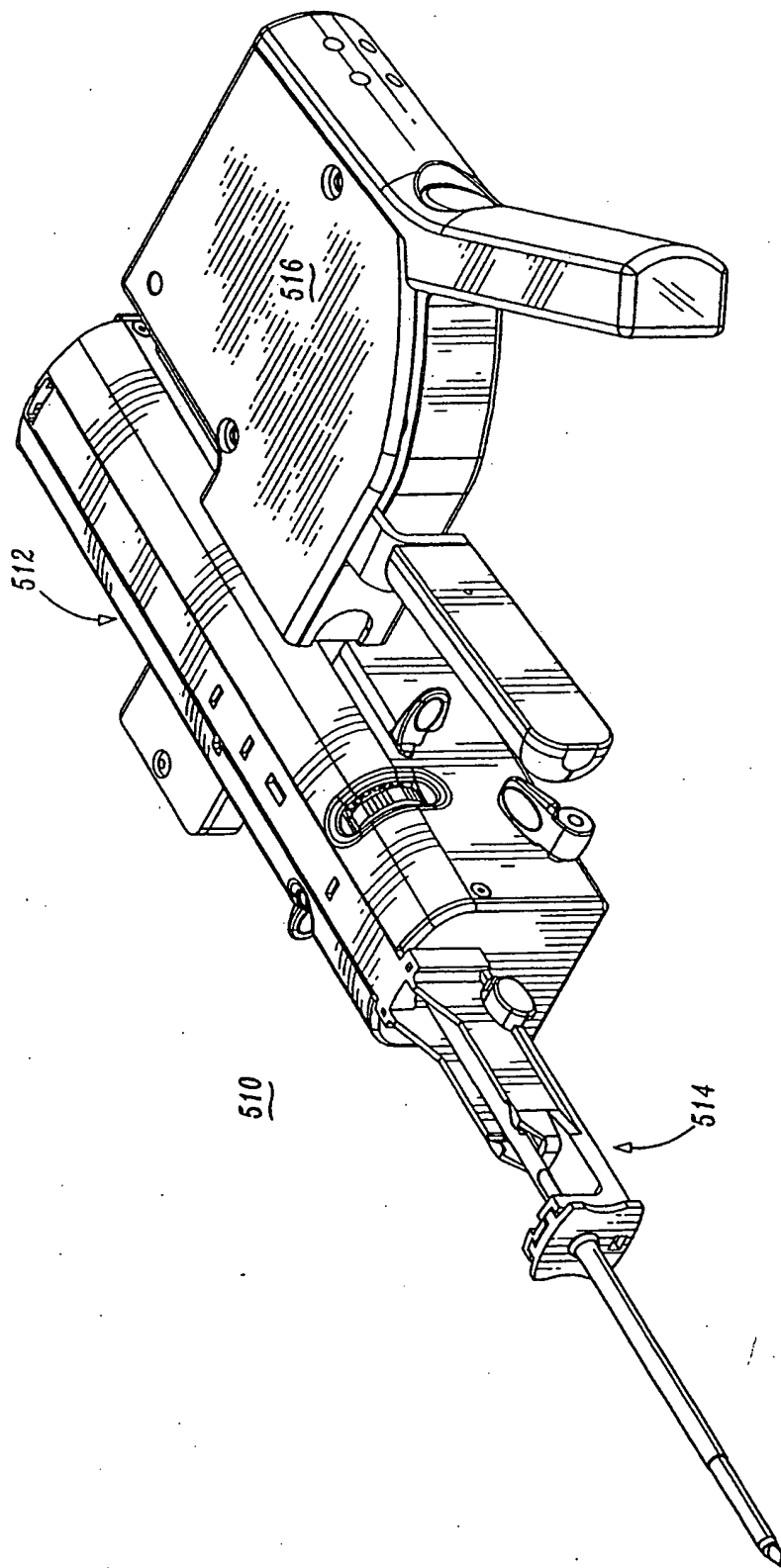


FIG. 17

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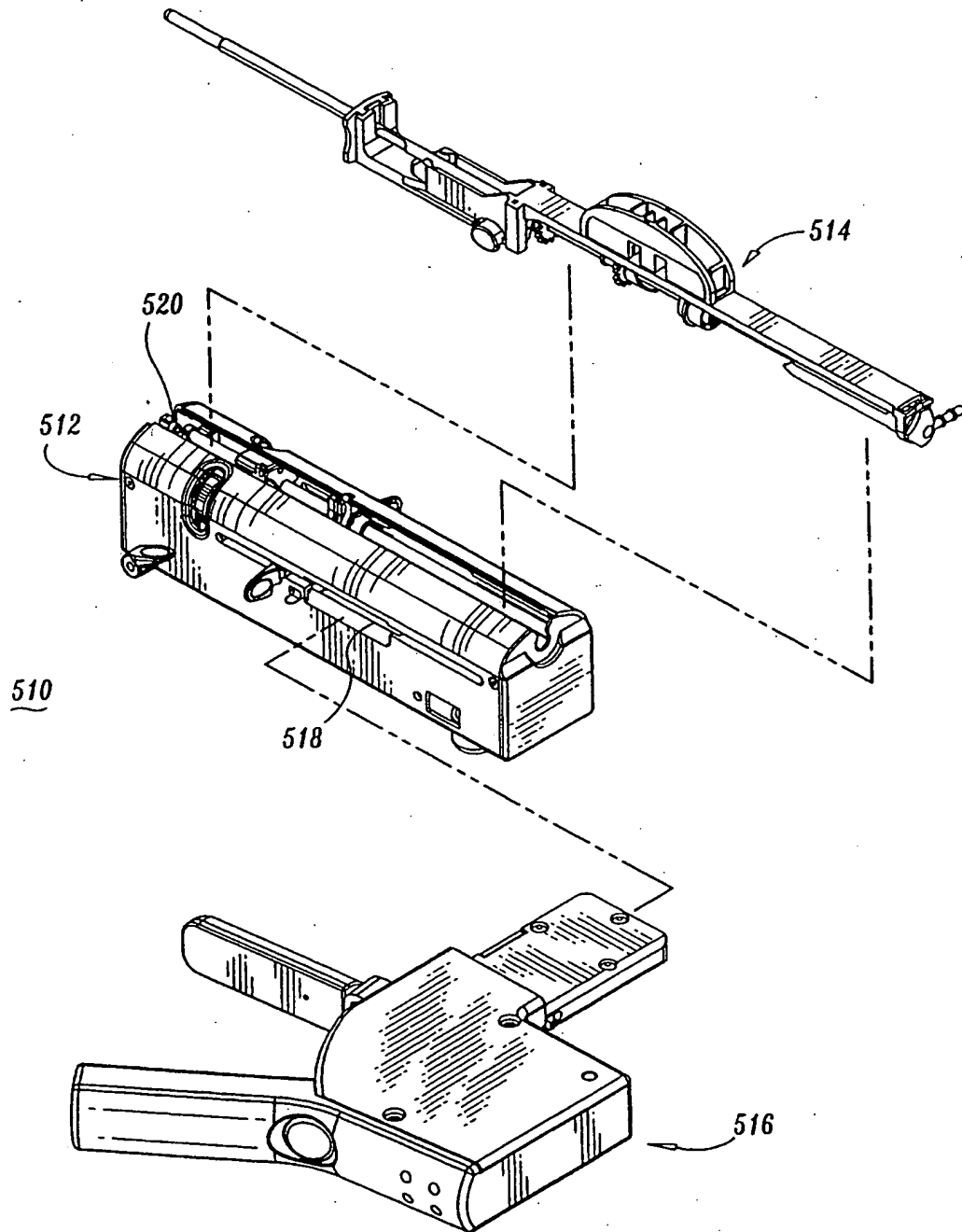


FIG. 18

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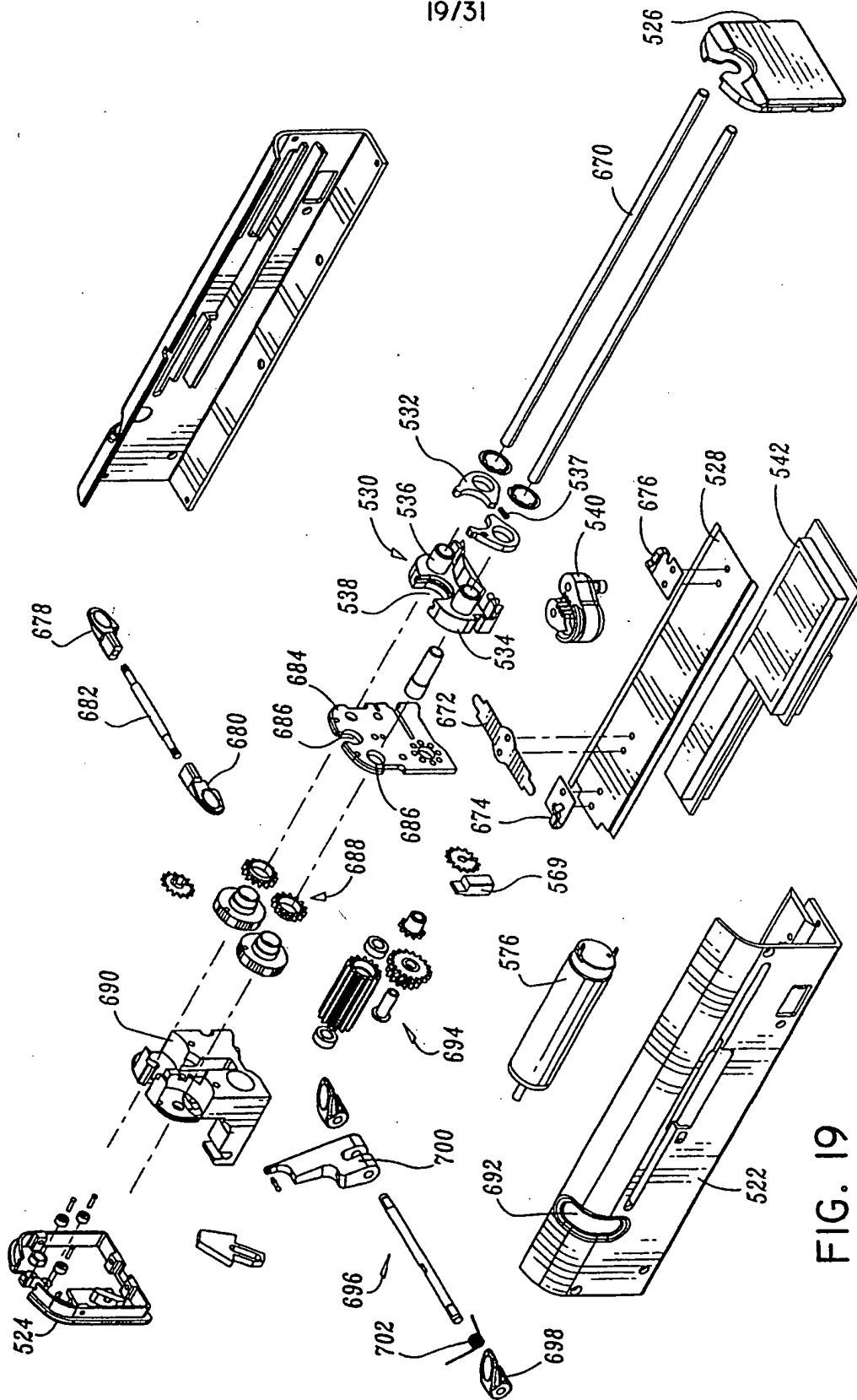


FIG. 19

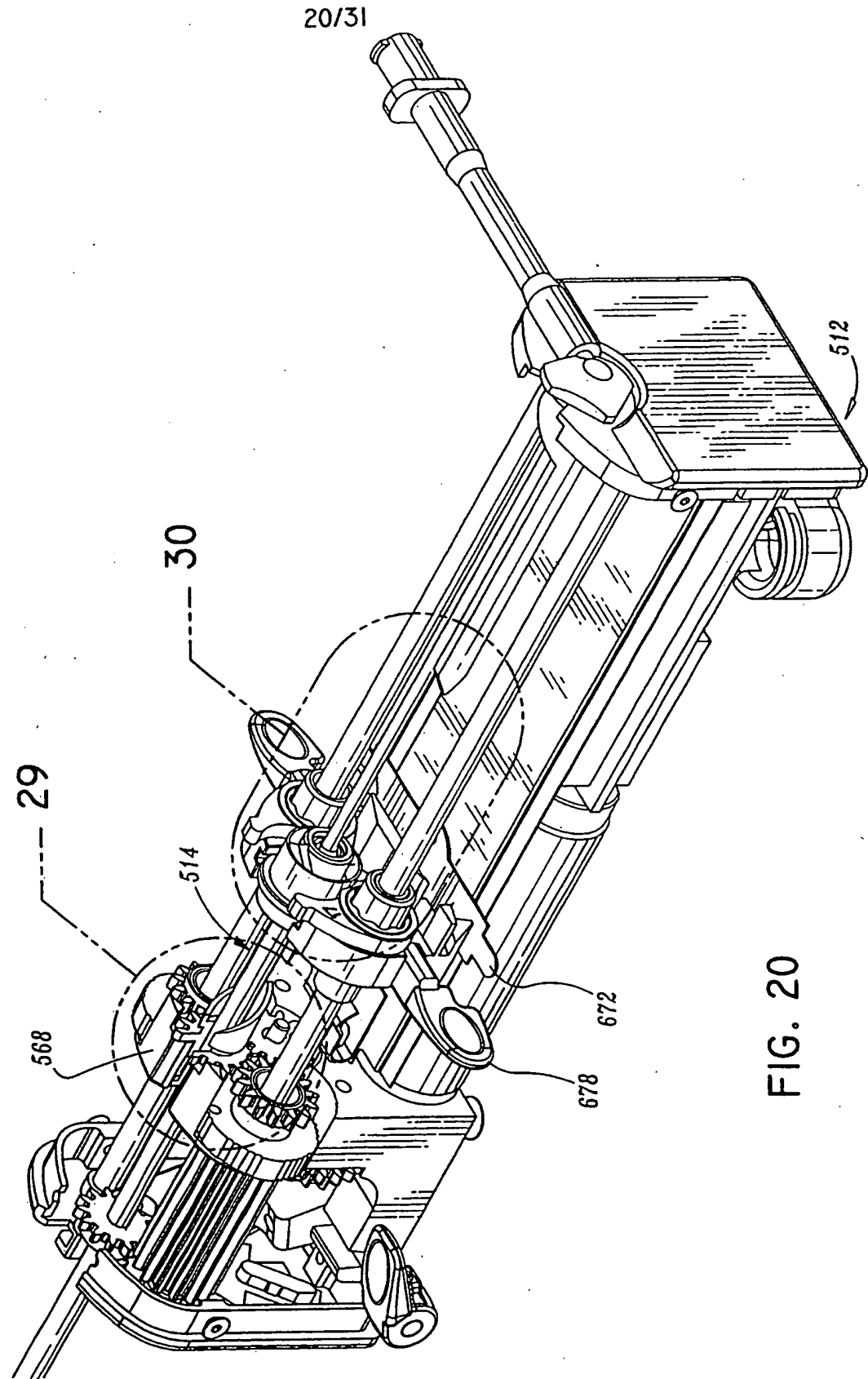


FIG. 20

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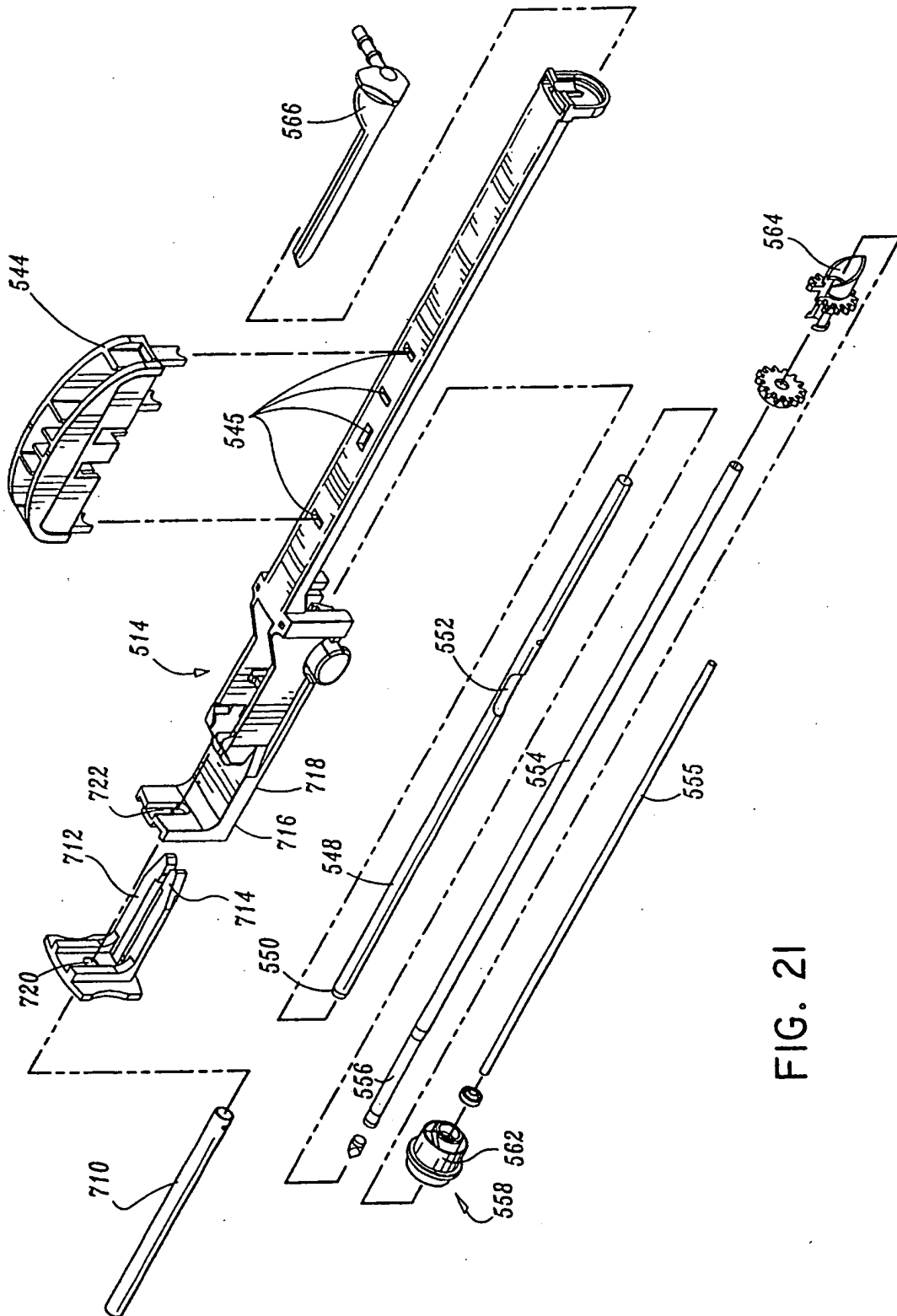


FIG. 21

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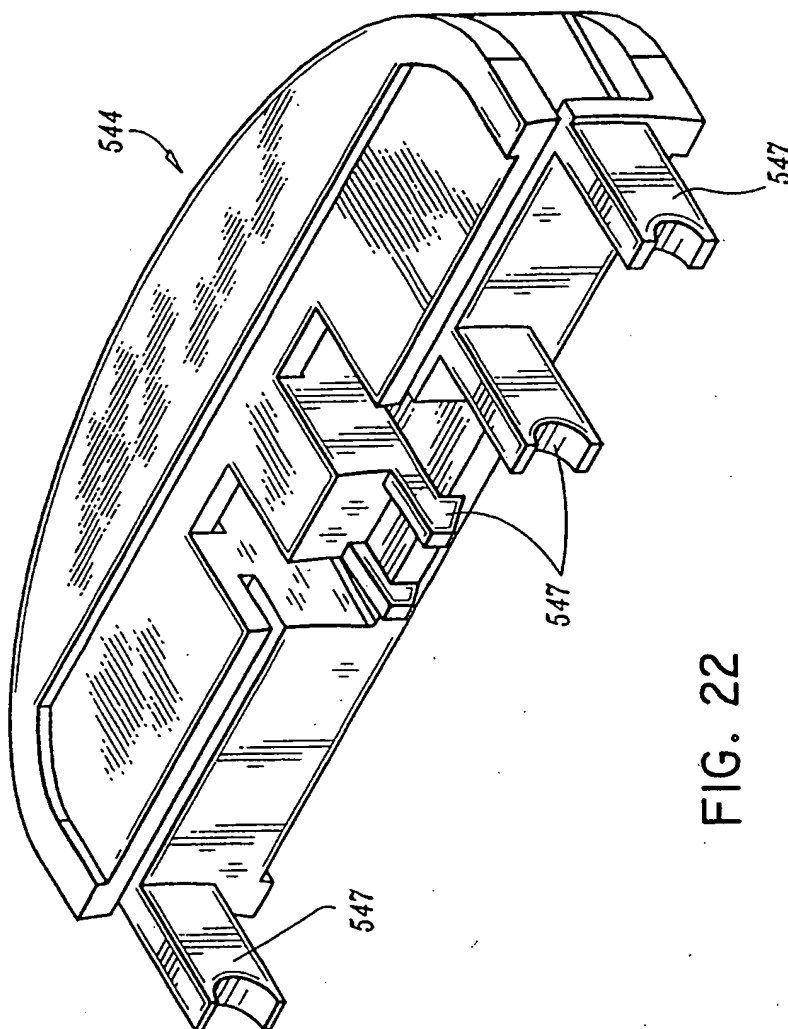


FIG. 22

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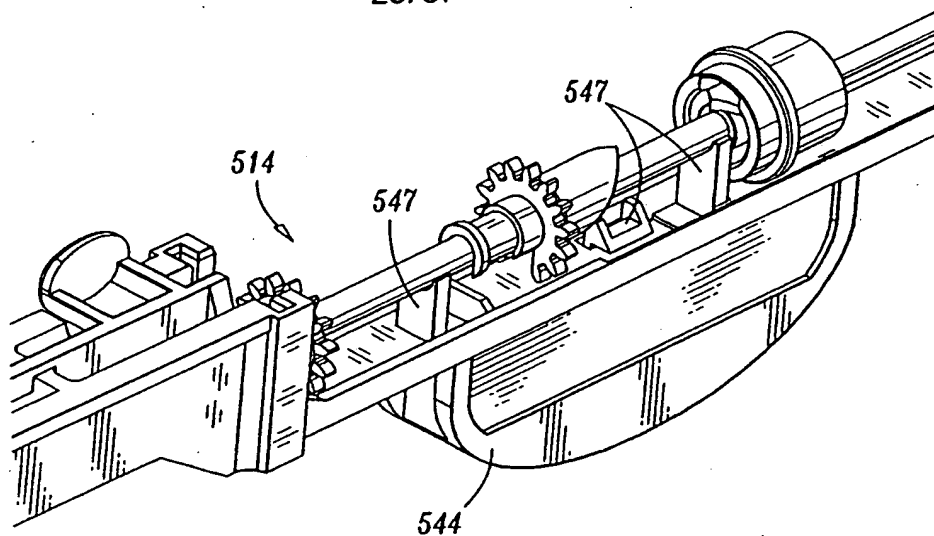


FIG. 23

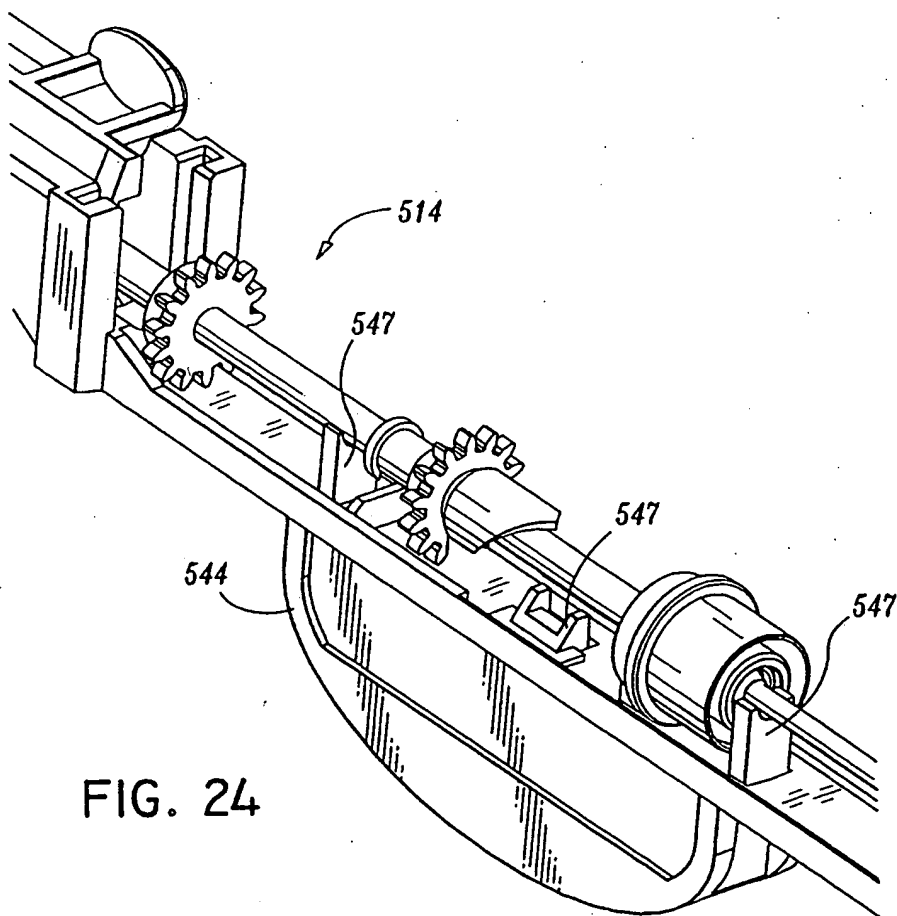


FIG. 24



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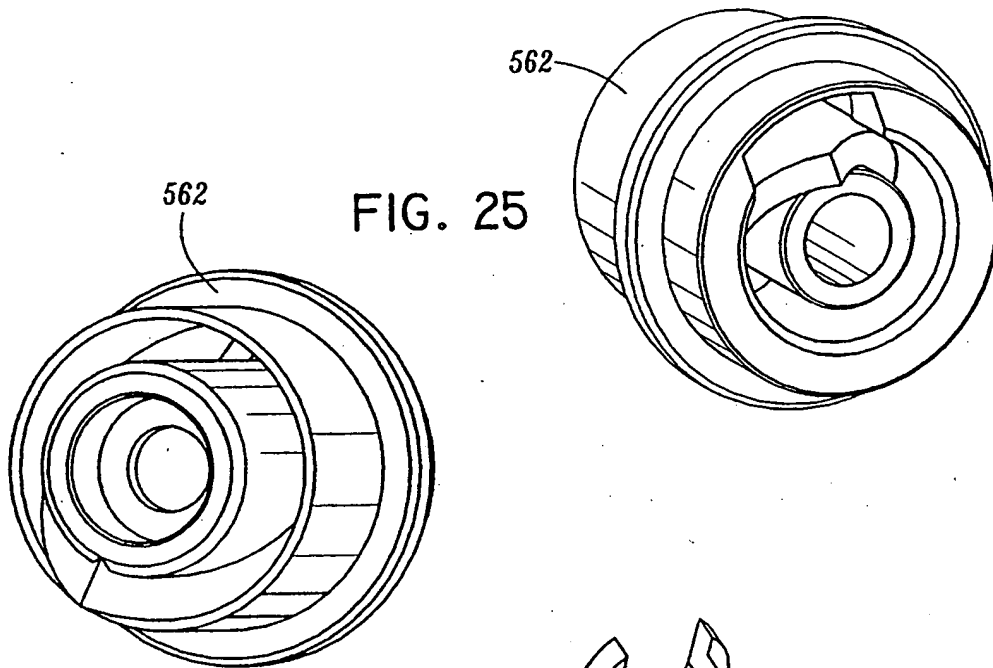


FIG. 25

FIG. 26

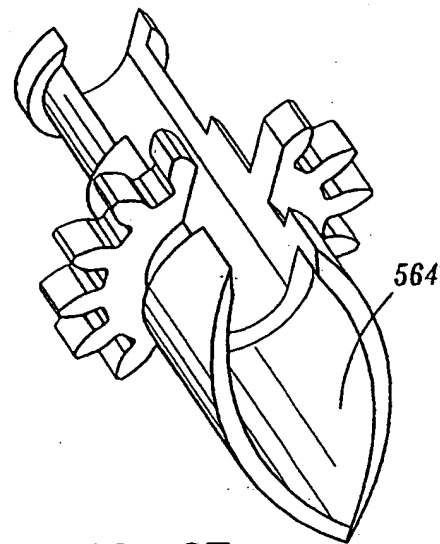


FIG. 27

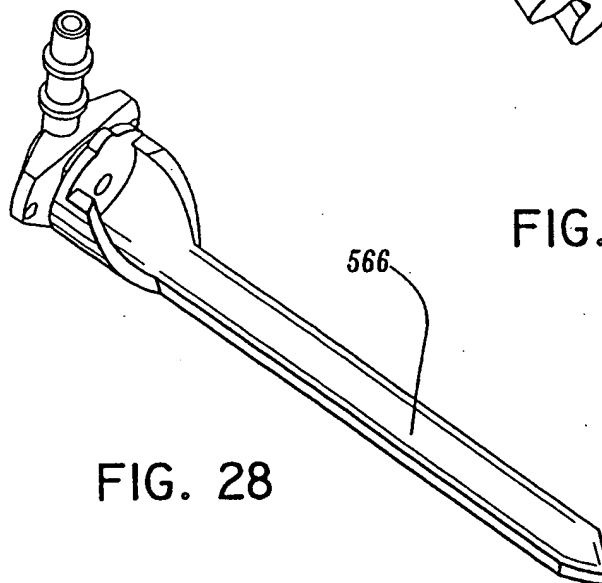


FIG. 28

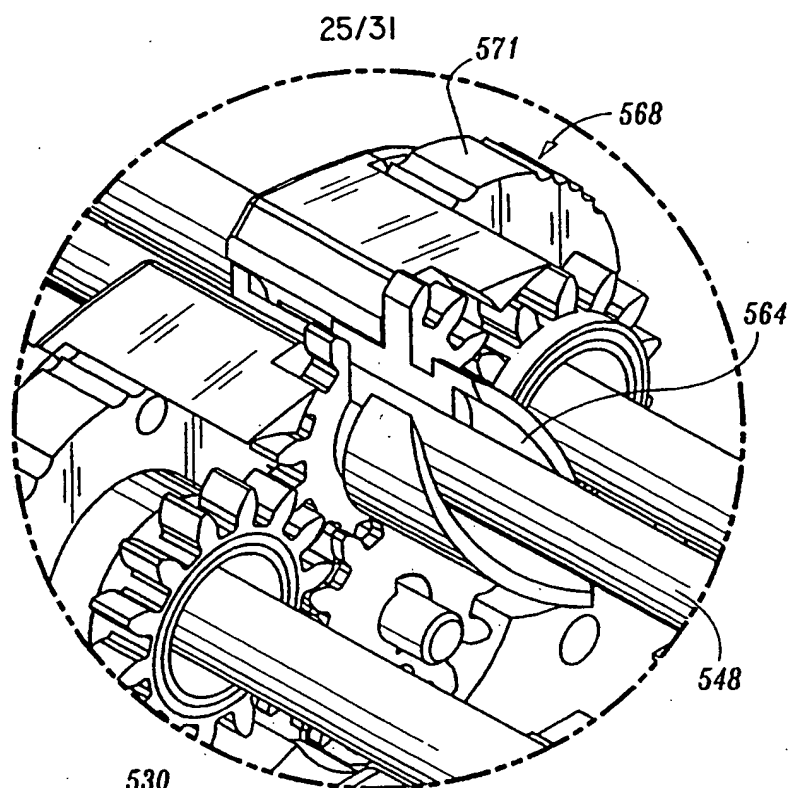


FIG. 29

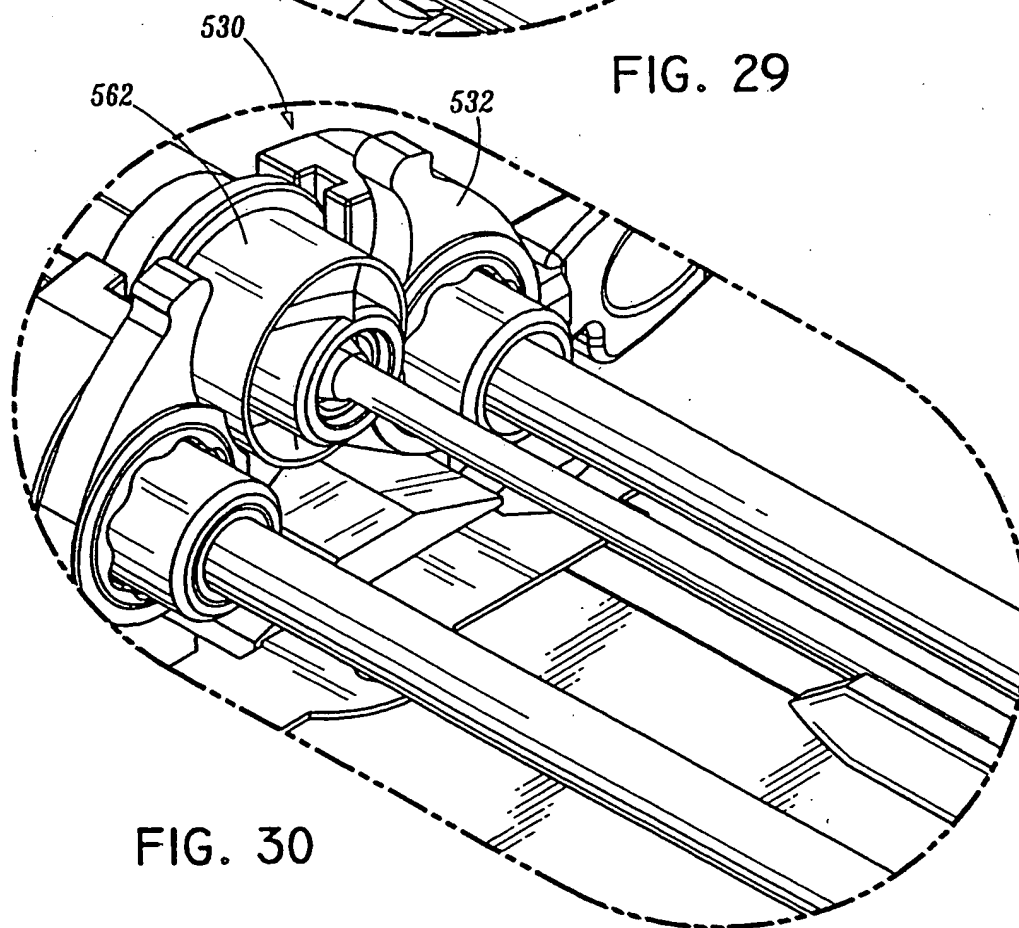


FIG. 30

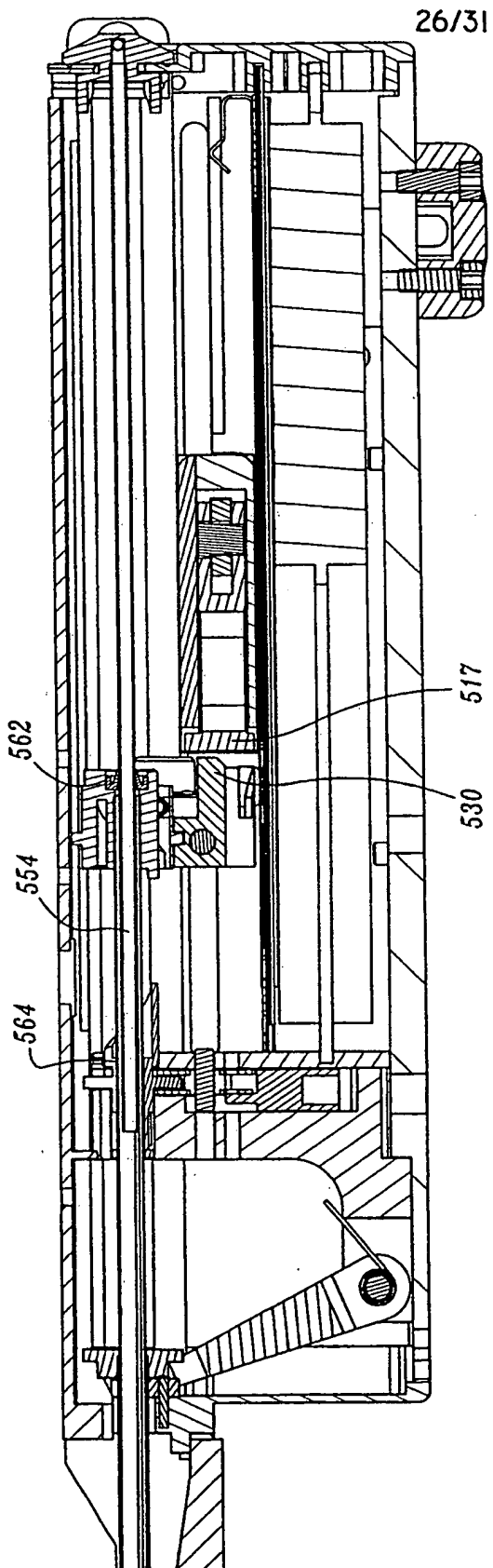


FIG. 31

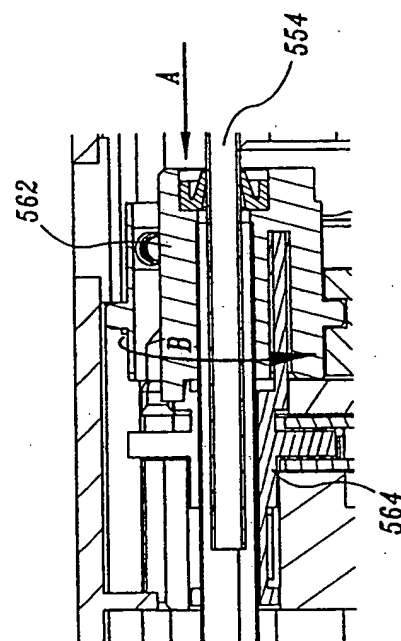


FIG. 32

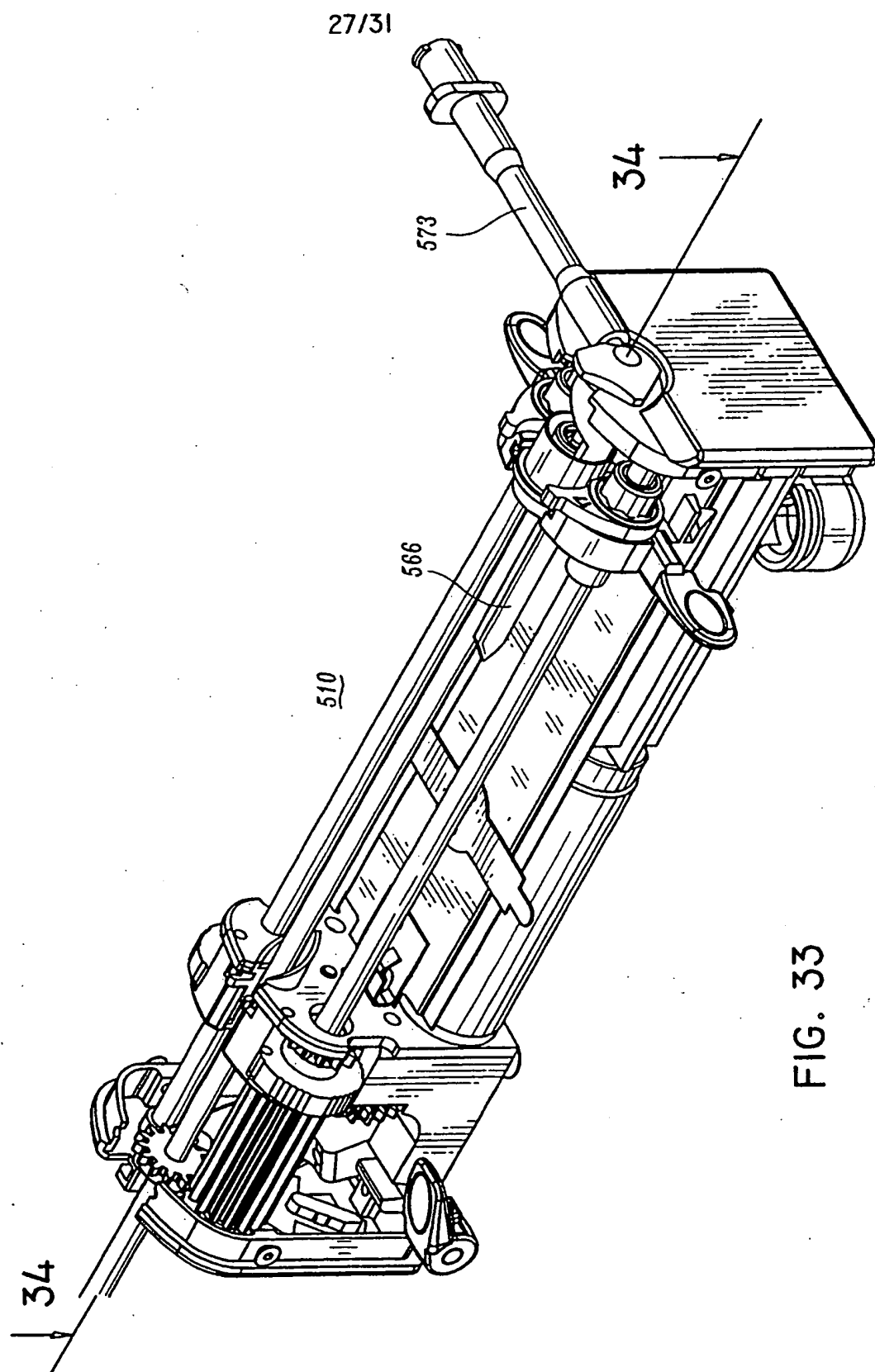


FIG. 33

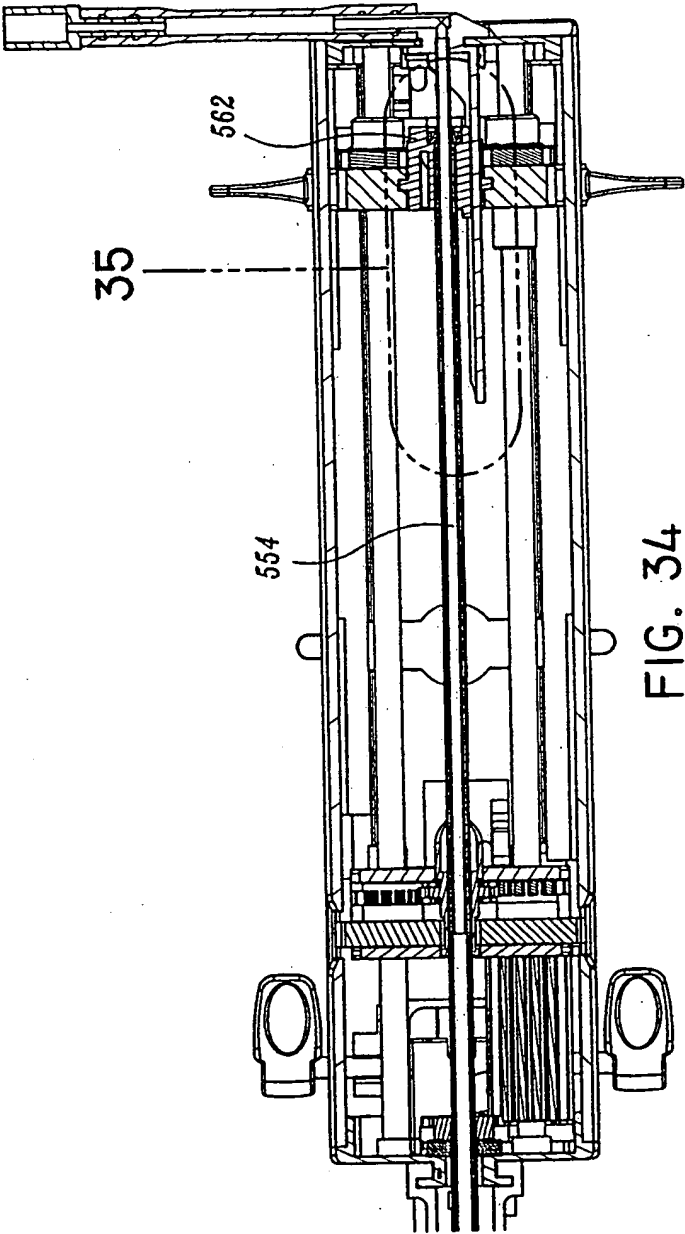


FIG. 34

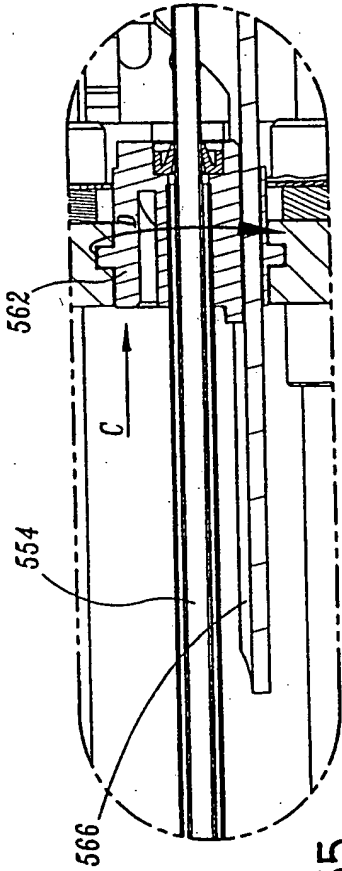


FIG. 35

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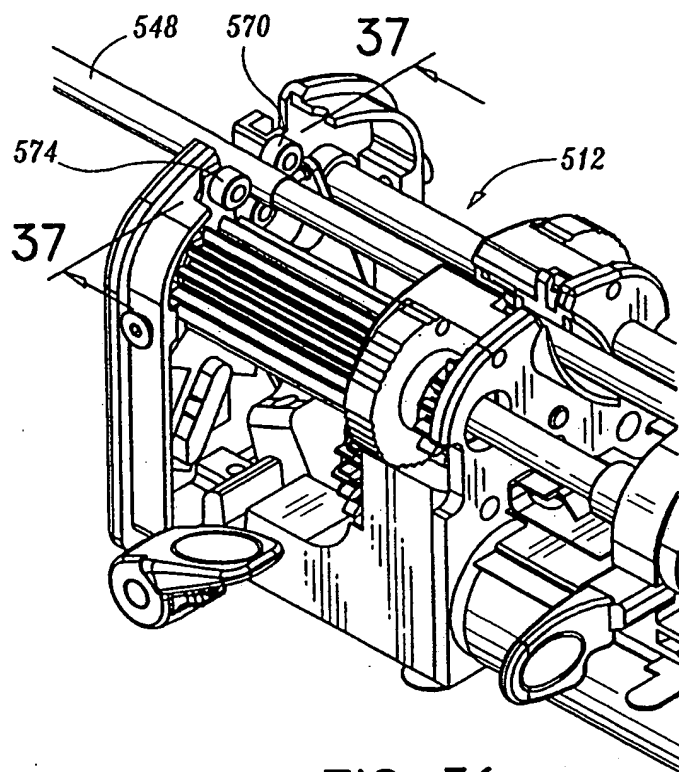


FIG. 36

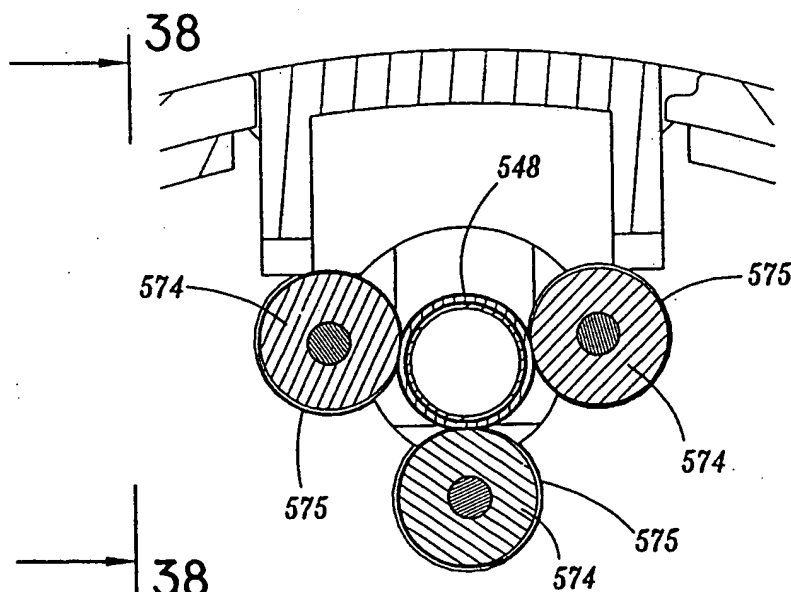


FIG. 37

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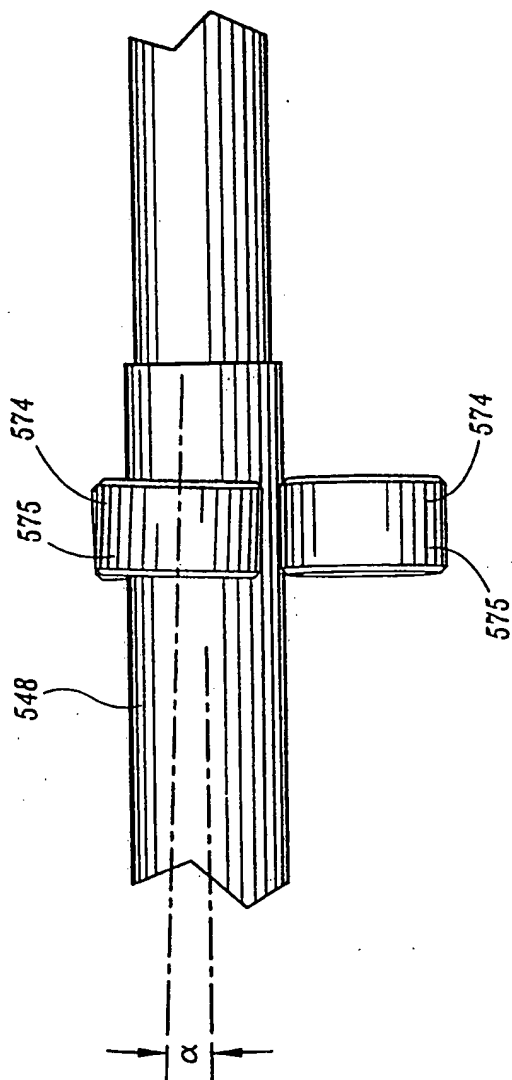


FIG. 38

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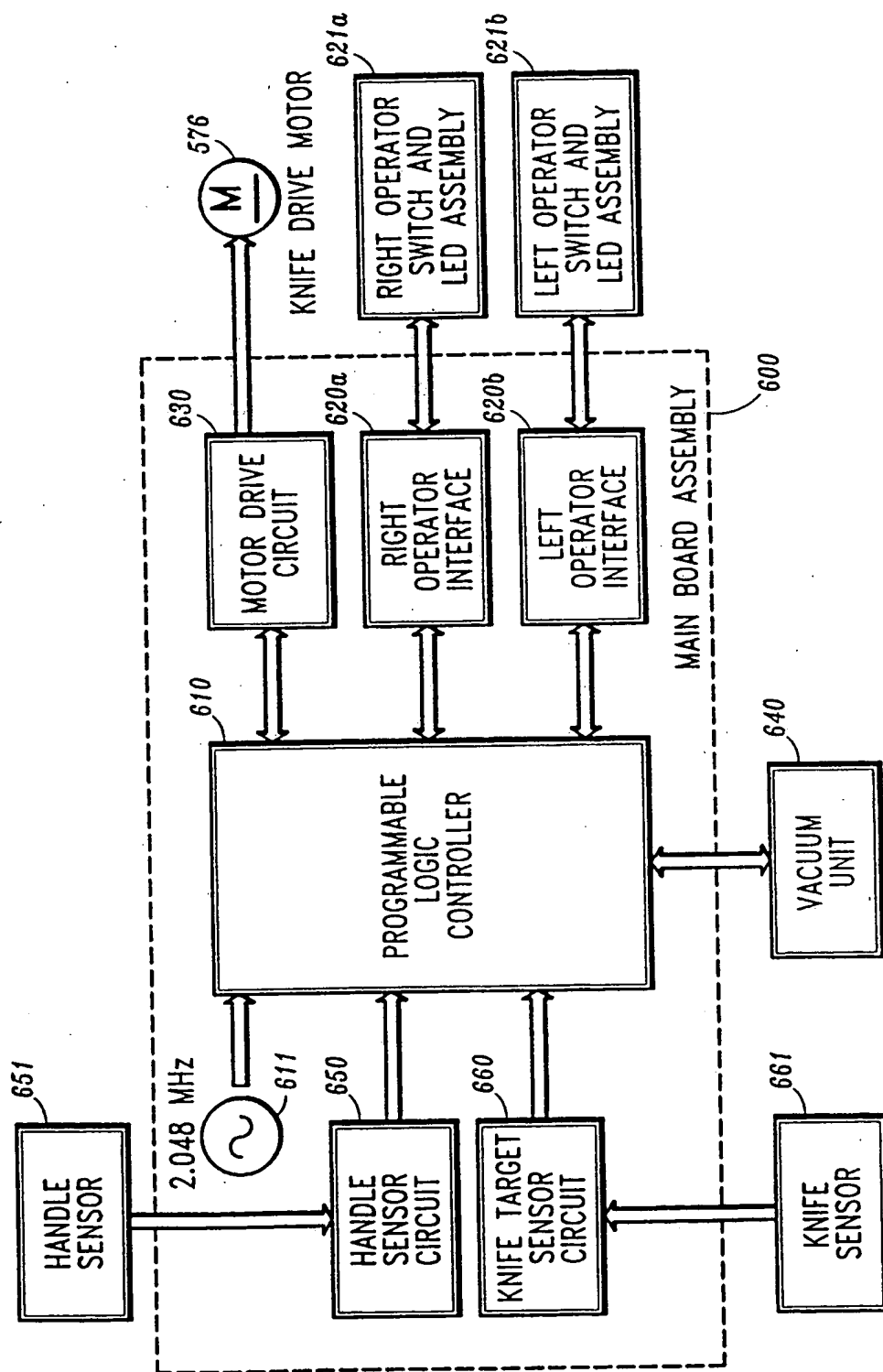


FIG. 39



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US99/27838

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :A61B 10/00

US CL :600/564

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/564-567

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,752,923 A (TERWILLIGER) 19 May 1998, col. 5 lines 30-45, and col. 8 lines 27-39.	1-3, 8, 9, 23, 42, 43 ----- 10, 24
Y	US 5,570,699 A (KASS) 05 November 1996, col. 7 lines 55-60, and col. 8 lines 37-43.	10, 24
A	US 5,687,739 A (McPHERSON et al.) 18 November 1997, entire disclosure.	1-43
A	US 5,368,045 A (CLEMENT et al.) 29 November 1994, entire disclosure.	1-43

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*O* document referring to an oral disclosure, use, exhibition or other means	
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Date of the actual completion of the international search

19 APRIL 2000

Date of mailing of the international search report

10 MAY 2000

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